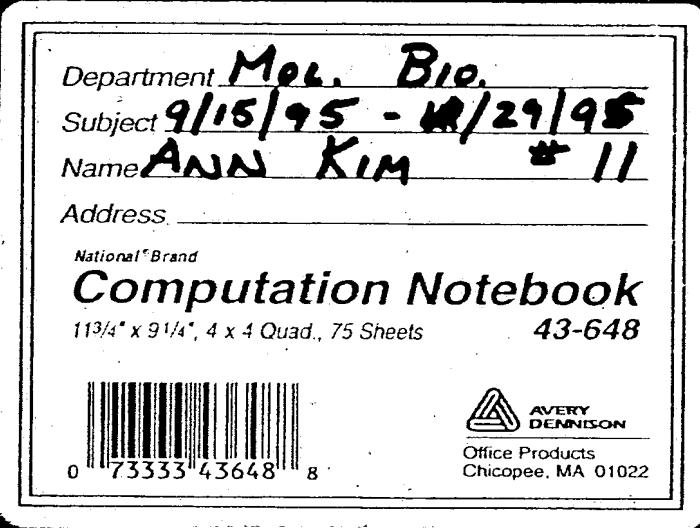


Steven M. Ruben
Appl. No. 10/662,429

BEST AVAILABLE COPY



Ruben EXHIBIT #94

Department Mol. Bio.
Subject 9/15/95 - 10/29/95
Name ANN KIM # 11

Address _____

National® Brand

Computation Notebook

11 1/4" x 9 1/4", 4 x 4 Quad., 75 Sheets

43-648



0 73333 43648 8



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Ruben EXHIBIT 2094
Ruben v. Wiley et al.
Interference No. 105,077
RX 2094

(See Pg 152 Book #10 → Lab Notebook # 345)

9/15/95

Wash Blot 1X PBS.

5min at RT w/ shaking
Add 20 μl at 1:20000
in PBS

Incubate at RT for 1 hour with
shaking

Rinse in 1X PBS

Wash 5min at RT w/ 1X PBS

Rinse in 50mM Na₂HPO₄ pH 7

5min at RT

Add Substrate:

12. 5ml 50mM Na₂HPO₄ pH 7

25 mg β NADH

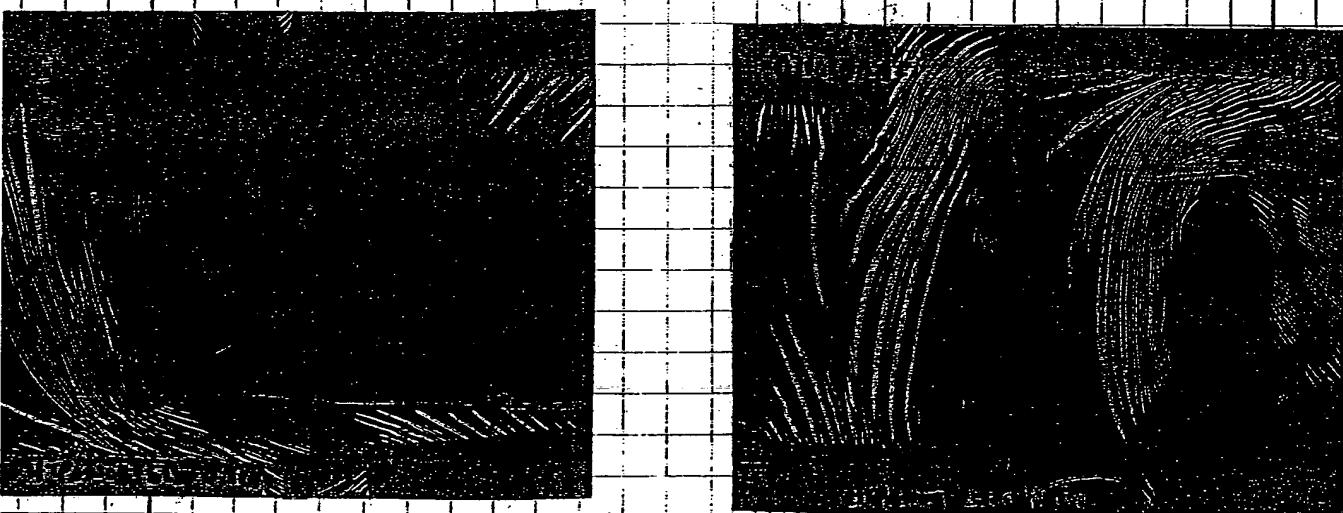
25.0 μl phenol

8.5 μl 30% H₂O₂

0.375 ml NBT (10mg/ml)

Incubate at RT until color develops.

Stop Reaction with dH₂O

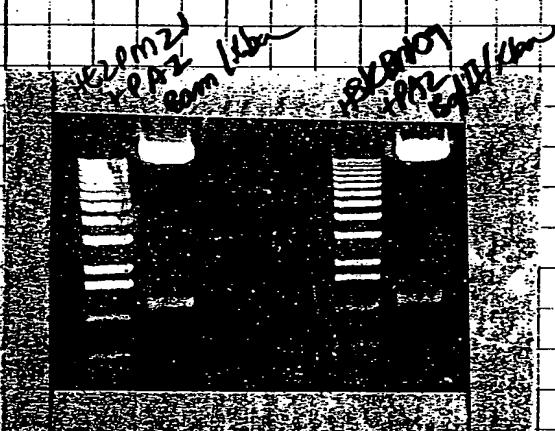


fix 10s Cells
Split 1 flask 1:40

18

9/22/95

Ran 10ul on gel w/ 1kb ladder.



looks good

Submit for Sequencing

H2Pm21+PA2.)	HSK6N09 + PA2
RPO1		RPD1
RP15		RPD3
RP16		RPD8
RP18		RP81
RP31		FPD4
FP02		FPD6
FP1		FP80
FP14		
FP17		
FP80		

Norm M Thib
9/24/95

9/25/95

Transfections of Lac Z / β -gal
in 100 μ g/ml & 1500 μ g/ml
R DEAE - Dextran

Remove Supernatant from Cells
Wash Cells 1x PBS 5 min
at RT
Fix Cells 3.7% Formaldehyde in PBS
Incubate at RT 30 min
Remove Fix
Wash Cells 2x PBS 5 min
at Room Temp

20

9/25/95

Submit HE2PM21 + PA2
to protein Expression.

Set-up Cells - Cos Cells
for transfections
6 Well plates
 1.5×10^5 cells / well

Clean-up DNA for transfections

HTPANO8SD4 pCDNA
pCDNA 3' HA
pCDNA 5' HA

HTYSB02 pCDNA
pCDNA 3' HA
pCDNA 5' HA

2x Phenol:Sevag (1:24, IAA:Chloroform)
2x chloroform

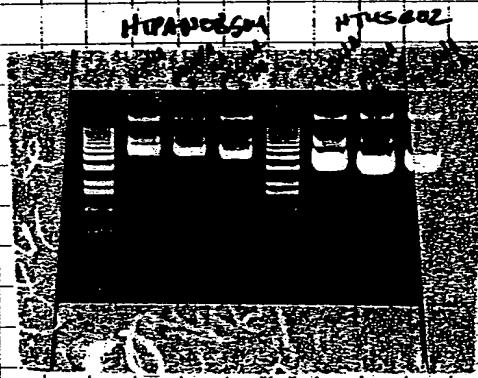
2x EtOH opt.
Wash 70% ethanol - Let pellet dry
Resuspend pellets in 100ul TG

9/26/95

Dilute DNA 1:200 in H₂O
Read OD_{260/280}.

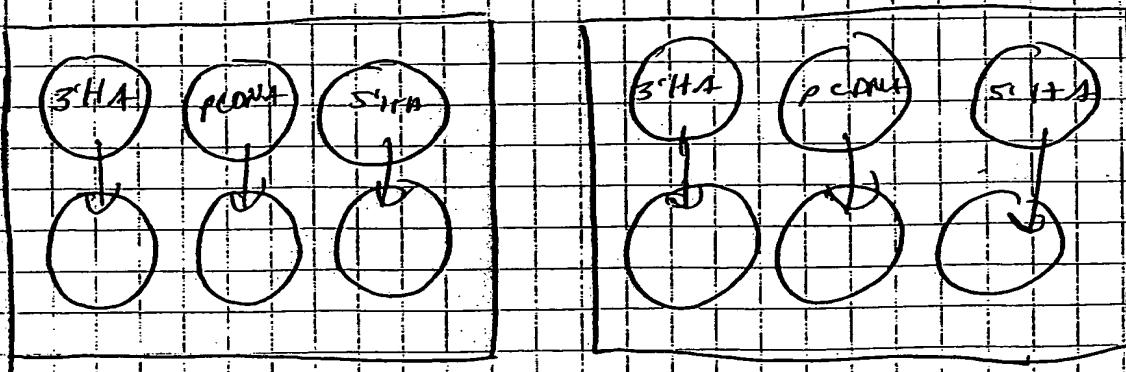
		260.0 nm	280.0 nm	260.0 nm	280.0 nm
		260.0 nm	280.0 nm	260.0 nm	280.0 nm
HTPANOS pCDNA	1.0481	0.0811		1.4833	0.8742 <i>0.46 ug/ml</i>
HTPANOS 3'HA	1.1177	0.0877		1.4566	0.8885 <i>0.40</i>
HTPANOS 5'HA	1.0481	0.0899		1.3024	0.7678 <i>0.5</i>
HTPANOS HT45B02		0.0551		1.5920	0.6281 <i>0.38</i>
HT45B02 3'HA		0.0571		1.4943	0.8692 <i>0.71</i>
HT45B02 5'HA		0.0451		1.5087	0.8626 <i>0.68</i>

Set up transfections
Run 1ul on gel code
1ICP ladder



Set up Transfections:

Use 100 μg/ml DEAE
Dextran
looks like it works the
best from Lac Z-Beta Gal Test



HTPANOS

HT45B02

9/26/95

HT4SB02	pcDNA	0.88 ug/ml	<u>5 μg</u>	<u>5.68 μl</u>
	pcDNA 3' HA	0.91 ug/ml	<u>5.51 μg</u>	<u>6.16 μl</u>
	pcDNA 5' HA	0.68 ug/ml	<u>3.25 μg</u>	<u>3.66 μl</u>
HTPancreas	pcDNA	0.46 ug/ml	<u>10.9 μl</u>	12.5 μl
	pcDNA 3' HA	0.46 ug/ml	10.9 μl	12.5 μl
	pcDNA 5'	0.5 ug/ml	<u>10.0 μl</u>	

Make 15 ml transfection Cocktail

1.5 ml Neutral serum

150 μl DEAE Dextran

150 μg Chloroquine 5 mg/ml

Mix well

Add 1 ml transfection Cocktail

10 μg DNA

Mix well

Add 10 μl well
Incubate 37°C / 5% CO₂ for
2 hrs.

Shock Cells

10% DMSO in CDMEM
Admin at RT

Remove Supernatant

9/28/95

TRANSFCTIONS -

HT4SBO2 + pCDNA / 5'HA / 3'HA

HTPAV08 + pCDNA / 5'HA / 3'HA

Cells have been incubating at 37°C
5% CO₂ for 48 hrs.

Remove media

Wash Cells 1x PBS, 5min.
Fix Cells w/ 3% Paraformaldehyde
in PBS.

1.5g paraformaldehyde

45ml H₂O

12.5ml 10N NaOH

Heat 40-50°C

Add 5ml 10X PBS.

Cool to RT

Fix for 30-35 min at RT

Wash Cells 10 min RT w/

PBS + 10mM Glycine

Incubate 5 min - time is critical
with 1% Triton X-100 in PBS.

Wash Cells 5 min RT with

PBS + 10mM Glycine

Incubat Cells 1/2 hrs RT with
PBS + 25mM Glycine.

Block Cells in Antibody Binding Buffer

20mM NaHPO₄, pH 7.0

0.5M NaCl

0.05% Tween-20

1% BSA

With 2% Goat Serum for 2 hrs at
Room Temp

26

9/28/95

Remove Blocking Buffer
Add 10⁶ Antibody into Antibody
Binding Buffer + 2% Goat
Seraum
use HA TAG + SCP-12CA5-J
Purified Ab.
at 1:1000 dilution
Incubate at 4°C overnight

ENTERED Project information for:

HSRBNO9
HT4SBOZ
HE8SH4B
RPR HE2PM21 → HDAAH6852
into IRIS!

Split Cos Cells 1:40 into
T-75 flasks

9/29/95

Remove 10⁶ Ab
Wash Cells 2x - 10 min RT
with 10 mM Glycine in PBS
Remove Wash
Add 2nd Ab 1:2500 RITC Conjugated
Antibody in Ab Binding Buffer + 2%
Seraum
Incubate ~~RT~~ RT 1 hr w/ alum foil
Covered

9/29/95

Aspirate off 2° Ab
 Rinse Cells 1x 10mM Glycine + PBS
 Aspirate off Rinse
 Wash Cells 2x - add
 10mM Glycine + PBS
 Aspirate off Wash
 Add 2 drops of photo mount
 and Cover w/ glass Cover Slip
 View under fluorescent microscope
 Keep Covered in Alumus. foil at
 4°C.

Submit -
 HE2PM21 + PA2
 HSKBNO9 + PA2.
 HE2PM21.
 for Sequencing

10/2/95

Split Cos Cells
 1:40 into T-75 flask
 and plate out 2 12-well plates
 for transfections
 Seed plates at $n \times 10^5$ cells/well
 Incubate 37°C 5% CO₂ O₂/N₂

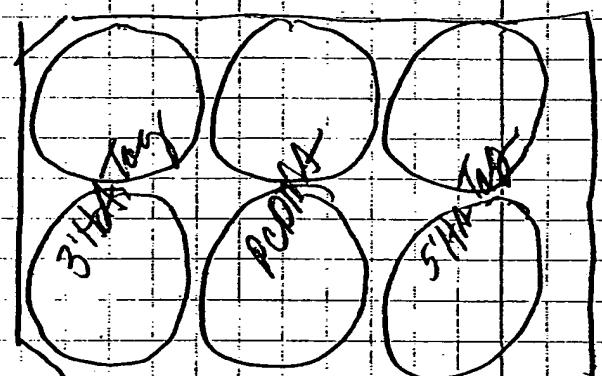
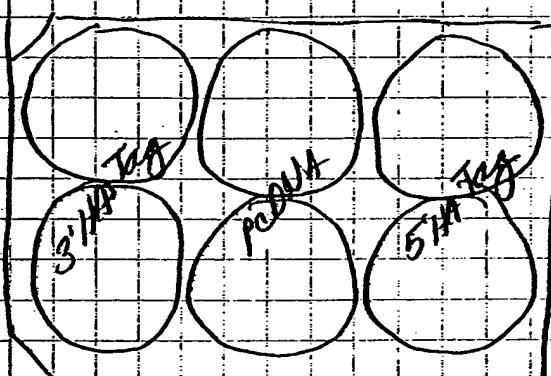
PCR New
 HE2PM21 - PCR'd insert
 New 5' NCO I primers made

0/3/95

Transfections:

			<u>Conc ug/ml</u>	<u>5ug</u>
HT4SBO2	pCDNA		0.88	5.44 μ l
	pCDNA 5'HA		0.68	7.35 μ l
	pCDNA 3'HA		0.91	5.5 μ l
HTPANOS 51bpATG	pCDNA	0.46	10.9 μ l	
	pCDNA 5'HA	0.5	10 μ l	
	pCDNA 3'HA	0.4	12.5 μ l	

Set up duplicates of each.



Make 15 mls Transfection Cocktail

1.5 ml Neutraloma
 150 μ l DEAE-Dextran (10mg/ml)
 150 μ l Chloroquin (5mg/ml)
 mix well.

Add 1ml to 5ugDNA & Pipet well
 Add to well
 Incubate 37°C 5% CO₂ for 2 hrs.

Remove Transfection Cocktails from
 wells

32

10/4/95

Inoculate 4 ml LB + Amp/Kan.

HTPBVII + PQE60 - 34

HMSAF22 + PQE60 - #A

HTPAN08 51bp ATG + PDD - D1

" " " + " - D5

" " " + " C7

" " " + " A2

Inoculate 4 ml LB + Kan.

M15 rep5 Cells

Inoculate from frozen glycerol stocks.

Incubate 37°C 5 hours -

till OD₆₀₀ ~ 0.4-0.6

To 1000 μl LB + Amp Kan.

+ transfer 100 μl of culture.

To remaining culture add 100mM IPTG to 2mM - 80 μl

Incubate 2 hours

Stage at RT O/N.

Next day
10/5/95

Rin 2 15 well 12.5% Gels
with induced and uninduced cultures.

- Spin @ 500 μl Culture 2 min

Aspirate off supernatant

Resuspend pellet in 100 μl H₂O

10/5/95

Add 100 μ l 2x Dissociation Buffer
 Mix well
 Heat Samples 100°C 5min
 Spin 45 min
 Load 12.5 μ l onto gels.

lane Sample

- 1 Uninduced > M15 cells
- 2 Induced > M15 cells
- 3 U > HTPBY11 + PQEGO 3-4
- 4 U > HMSAF2Z + PQEG #19
- 5 U > HTPAN08 51bpATG + PD10 D9
- 6 Rainbow Marker
- 7 U > HTPAN08 51bpATG + PD10 D7
- 8 U > " " " + " C7
- 9 U > " " " + " A2
- 10 Gel - Set up wet transfer

Run Gel - 150V 1 hour

Transfer Buffer:

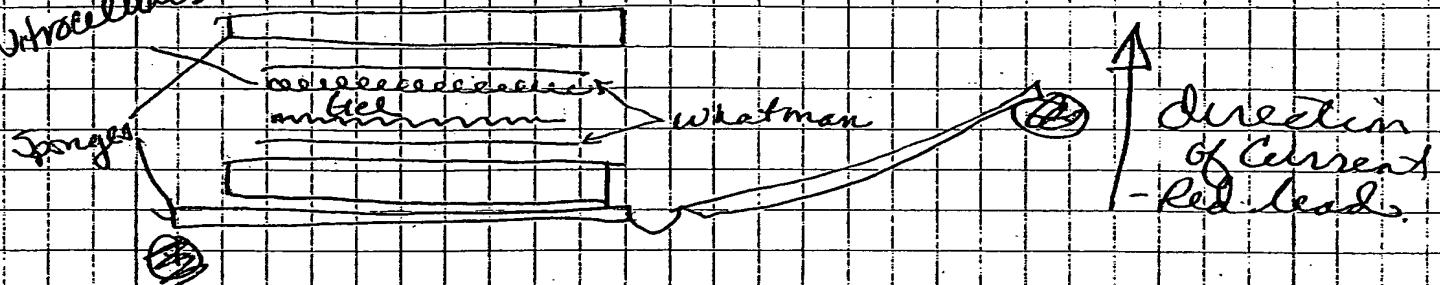
25mM Tris pH 8.3
 192mM Glycine
 20% MeOH

- Cold

Set up Gel Sandwich in
 Support

10/5/95

nitrocellulose



Run 100V 1 hour.

Block Blot in
Western Blocking Buffer:
3% BSA (v/v)
0.02% Na-Azide
in PBS

Incubate at RT w/ Shaking
2 hrs

Pour off Blocking Buffer.
Add 1/10 Ab in Western Blocking
Buffer at 1:100 dilution.

Use Rabbit Antibody
#11941 - large bleed
Incubate at Room Temp Overnight
with Shaking

With other gel
Stain
DESTAIN.

Take picture
of Gel

Electrophorese 50 ml
1.8 Amp Kan with
HTPA 208 V9



10/5/95

HE28M21 + PDE6C -
 Transform into MIS sup 4 cell
 thaw Chemically Competent Cells
 on ice
 (to 100ul of thawed cells add
 10ul of ligation
 Alcannatall on ice for 1 hour
 Heat Shock 42°C 1 min
 place冰上
 Add 400ul LB
 incubate 37°C 1 hour
 Plate onto LB-Amp/kan plates
 incubate 37°C overnight

Transfections

HT1080 / HT143BD2

Remove Complete DMEM
 Wash Cells 1X PBS 5 min
 Remove wash
 Fix Cells 3% paraformaldehyde
 in PBS 50ml
 15 mg Paraformaldehyde in
 25 ml (0.65)
 Add 12.5 ml 100% water
 heat 40-50°C to dissolve
 Cool to room temp
 fix Cells in one plate paraformaldehyde
 for 30 min at RT w/ shaking
 Remove paper
 Wash Cells 10 mM Glycine in PBS
 5 min at RT w/ shaking

10/5/95

Remove Wash

To 1 set - add 1% Triton X100 in
1X PBS - into well

Incubate 5 min at RT.

To other set wash with 10mM Glycine
+ 1X PBS

Remove Triton X100 solution

Wash Cells 10mM Glycine + 1X PBS - 5min

Remove Buffers

Wash cells w/ 10mM Glycine + 1X PBS

5min w/ shaking

Remove Wash

Incubate Cells 25mM Glycine
+ 1X PBS at Room Temp 1/2 hrs.

with shaking

Block Cells in Antibody Binding

Buffer + 5% Goat Serum

20mM Na₂HPO₄, pH 7.0.

0.5M NaCl

0.05% Tween 20.

1% BSA

Incubate at Room Temp 2 hrs

with Shaking

Remove Blocked Buffer

Add 1/2 Antibody, anti-Antibody

Binding Buffer

use HA-Taq purified AP

1:1000 dilution

Incubate 4°C O/N. with

shaking

10/6/95

Transfections - HT4SBD2 / HTPAox8

Remove primary antibody

10/6/95

Wash Cells 2x in 1X PBS + 10mM Glycine
 5 min at Room Temp
 Remove Wash
 Add 2° Ab - at 1:2000 Dilution
 RITC conjugated Ab
 in Antibody Binding Buffer +
 2% Goat Serum
 Incubate at RT w/ Shaking
 for 2 hours Covered w/ aluminum
 foil
 Remove 2° Ab
 Rinse Cells 2x in 1X PBS + 10mM Glycine
 at Room Temp 5 min
 Remove all of liquid
 Add 1 large drop of photo mount
 Cover w/ w/ cover slip
 Store 4°C Covered w/ Aluminum
 foil

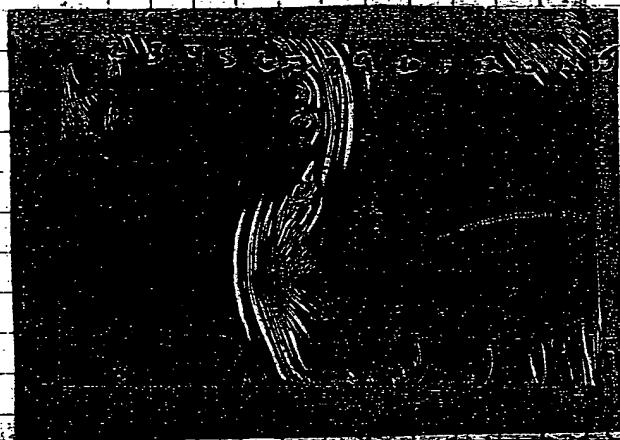
HTPAN08 Western

Pour off 1° Ab
 Rinse off filters in 1X PBS
 Wash filters in 1X PBS 5 min at RT
 Add 1° Ab - Anti Rabbit Peroxidase
 - Dilute 1:2000 in 1X PBS
 Incubate at Room Temp w/ shaking
 2 hours.
 Rinse filters 1X PBS.
 Wash filters 1X PBS - 5 min at RT
 Rinse filters w/ 50mM Na₂PO₄ pH 7
 Wash filters
 50mM Na₂PO₄ pH 7 for 5 min at RT w/ shaking

HTPAN08 Western

10/6/95

Add Substrate:

12.5 μ l 50mM NaH₂PO₄ pH 725 mg β -NADH25 μ l phenyl8.5 μ l H₂O₂37.5 μ l NB-T₂ Nifro blue Tetrazolium
(10mg/ml)Incubate at RT until color change
is seen and Developed to discoloration.Stop Reaction with distilled H₂O.
Dry on filter paper

- 1 +] m15
- 2 -]
- 3 +] HTPAN08
- 4 -]
- 5 +] HNSAF2Z
- 6 -]
- 7 +] HTPAN08 D9
- 8 -]
- 9 Rainbow Marker
- 10 +] HTPAN08 D5
- 11 -]
- 12 +] HTPAN08 C7
- 13 -]
- 14 +] HTPAN08 A2
- 15 -]

HTPAN08 + PDI0 #Q D9
InductionInoculate 100 ml LB Amp/Kan
with 30 ml of overnight Culture

40

10/10/95

HIPANCO PD10 D9 - Induction
Incubate 37°C w/aeration
till OD₆₀₀ = 0.4 - 0.6 - incubated
2 1/2 hours
Add 100mM IPTG to 2mM -
(0.30 mL → 12.6 mL)
Incubate 4 hours w/aeration
at 37°C
Spin Cultures 3K 30 min
Pour off Supernatant
Resuspend pellet @ total of
70 mL 6M Glycerol pH 8
Store 4°C over the weekend

HE2PM21 + POE60

Incubate 200 μL 1B + 0.5 μL taq
in 96 well plate
Incubate with colonies -
72 °C for HE2PM21 + POE60 and
60 °C for POE60 Barn/No
Incubate 37°C at Room Temp
over the weekend

10/9/95

HE2PM21 + POE60 PCR.

Check Cultures for Viraids

10/9/95

HTPAD08 PD10 D9 Induction

Spin Cellcon 6M GnHCl 8K

30 min

Transfer Supernatant to fresh
tube
Store on ice

Prepare Ni-NTA Column

To Column Add 5ml Resin Slurry

Wash w/ 30ml dH₂OCharge Column by adding 30ml
0.1M NiSO₄Wash w/ 30ml dH₂O

Equilibrate 30ml 6M GnHCl pH 8

Apply Supernatant
Allow to flow - Collect all flowWash 50ml 8M GnHCl pH 8
- collect pH 8Wash 50ml 6M GnHCl pH 6.
- collect pH 6

Elute protein - 8ml 6M GnHCl pH 5

- collect pH 5

Strip Column - 50ml 6M GnHCl pH 2

- collect pH 2

Store at 4°C till tomorrow
Run on Gel

10/10/95

HERPM217POE (c) inductions

Heat Samples 100C 5min

Spin 2 min

Load 12.5ul per well

10/10/95

HTPANO8 PD/0 D9.

Run samples on gel

H ₂ O	4.50	μl
Samples	5.0	μl
0.1% NaDc	7.0	μl
50% TCA	5.0	μl

Dry well

Spin 10 min

Remove Supernatant

Resuspend pellet in 10 μl 0.2N NaOAc

Add 10 μl 2X dissociation Buffer

mix well

Heat 100°C 5 min

Run 20 μl on 12.5% SDS-PAGE

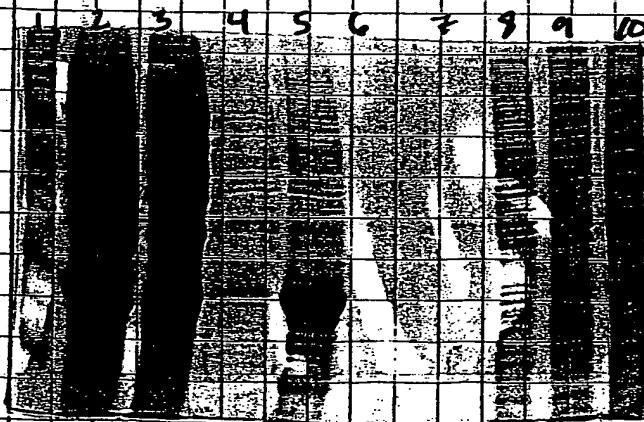
Stacking gel

Run 150V 1 hour

STAIN

DESTAIN

Dry on Bio Rad Axx Gel Dryer



- 1- Marker
- 2- Total Crude Extract
- 3- P100
- 4- pH 8
- 5- pH 6
- 6- pH 4.5
- 7- pH 2

HTPANO8 PD/0
D9

8 - UN	HELP M21
9 - 54	+ PDE 10
10 - 55	

10/10/95

Looks like there is still a lot of protein left in the flow -
 Reapply to Column
 - pH goes off - Most of Protein Came
 off of Column.

10/11/95

#

Regenerate Column.

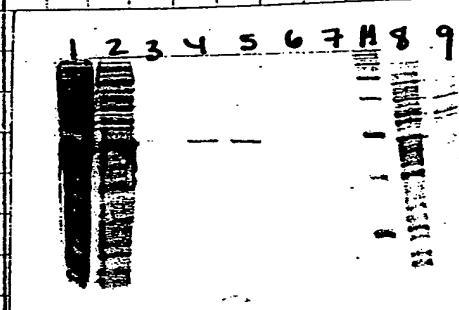
30 ml H₂O30 ml 0.1M Na₂CO₃30 ml H₂O

30 ml 0.1M GnHCl pH 8.

Add 0.1M to Flow from 10/10/95

Add 0.1M GnHCl pH 8
 elute protein off of Column - See pg 42
 10/9/95

Run 50ul on gel with 1kb ladder



1 - Creyde Extract

2 - Flow

3 - pH 8

4 - pH 6

5 - pH 5

6 - pH 2

7 - pH 5 from 10/9/95

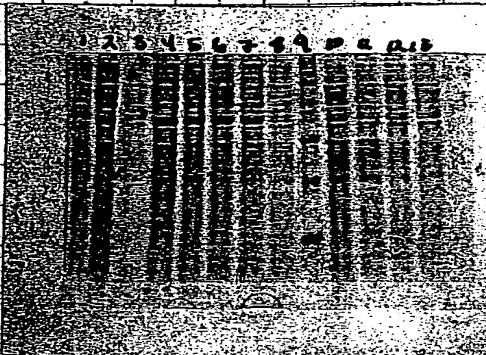
M - Rainbow marker

8 - 0.1M HEPANOS + PDI 0

D9, D8, D5

10/11/95

Rin Remaining Samples of HEPMA1 + PGE(60)
on gel with Rainbow marker
Stain Destain



- | | | |
|----|----------------|---------|
| 1 | HEPMA1+PGE(60) | 56 |
| 2 | 57 | |
| 3 | 58 | |
| 4 | 59 | |
| 5 | 60 | |
| 6 | 61 | |
| 7 | 62 | |
| 8 | UV induced | |
| 9 | Rainbow Marker | |
| 10 | D9 | |
| 11 | D5 | H2PAN08 |
| 12 | C9 | |
| 13 | A2 | 10/5/95 |

Inoculate 1 BT₂ + 15mM MgCl₂
with M15 hep⁺ & XL-1 Blue.

10/12/95

Make Chemically Competent XL-1 Blue
and M15 hep⁺

To 2 - 2l flasks with 300 ml
1 BT + 15mM MgCl₂
Add 3.5ml of O/TN culture.
Incubate 37°C w/10eratin 2-2½
hours until OD₆₀₀ = 0.4 to 0.6.
Transfer Culture to Sterile Centrifuge
Bottles. Cool on ice 30min.
Spin 5K for 30min at 4°C
(Beant Supernatant)
Resuspend pellets in solution A
ice cold for every 600 ml resuspend
in 300 ml

10/12/95

Solution A:

50 mM $MnCl_2 \cdot 4H_2O$ 50 mM $CaCl_2$

10 mM MES pH 6.5

- make Day ahead - store 4°C.

Let Cell suspension sit on ice

20 min

Spin Cells 5K 30 min

Resuspend cells in ice cold Solution
A + 10% 15% Glycitol

Resuspended in 3ml for every 50 ml

Starting volume - 184 ml

aliquot 500 ul into Sterile tubes.

and freeze on dry ice.

Store at -70°C

Reapply HTPAGE Substrate PDI D

to column.

Add more Alsen to column bed.

Regenerate Column.

See protocol pg 42 (10/9/95)

Run 50ul on gel

50 ul Sample

75ul 50% TCA

50ul 0.15% NaDOC

450ul H₂O

Mix well

Spin 10 min

Resuspend pellet 10ul 0.2N NaOH

Add 10ul 2X Dissociation Buffer

Heat 100°C 5 min

10/12/95

Beck Spin 1 min
 Run on 15% Acrylamide
 Stacking gel 100V 112 hrs
 Stain 30 min 37°C
 Destain DN at RT.

H2RPM21 + PDE60

B. Mini preps

Spin 1.5 ml Culture 2 min

Remove Supernatant

Resuspend pellet in 600ul

SST1 + RNase + Degasporine

Centrifuge 5 min

Spin 10 min

Remove Pellet

Add 600ul 13% PEG / 1M NaCl

Mix well

Spin 10 min

Remove supernatant

Wash pellet 1000ul 70% ethanol

Spin 3 min

Remove Supernatant

Allow pellet to air dry

Resuspend pellet 50ul TE

Run 1ul on gel with 1kb ladder

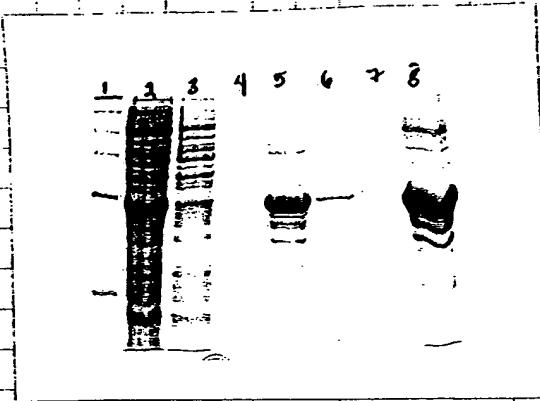


looks like
No DNA

May need to
re do

10/15/95

HTPANOS Stop ATG + PD 10 DP.



1 Rainbow Marker
 2 Crude Extract
 3 flow
 4 pH 8
 5 pH 6
 6 pH 5
 7 pH 3
 8 pH 5 - from 10/11/95.

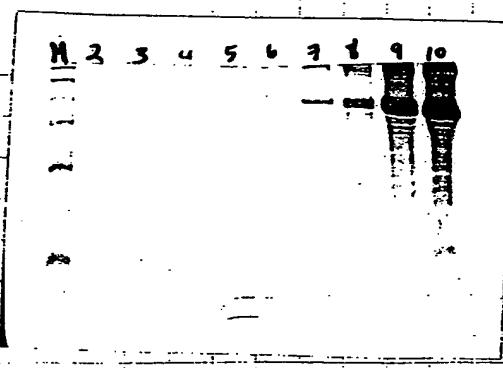
10/16/95

Run Gel

Quantitative gel of BSA 10mg/ml.

2 10ng
 3 50ng
 4 100ng
 5 500ng
 6 1μg
 7 5μg
 8 10μg
 9 100μg
 10 500μg

Run on 15% acrylamide gel with Rainbow marker
 150V 1 1/2 hrs.
 STAIN
 DESTAIN



50

10/10/95

Rew. Preparative gel of
HTPAN08 51 bp ATG + P870 D9
pH 6.

200 μ l pH 6.
150 μ l 50% TCA
100 μ l 0.15% Na DOC
800 μ l H₂O

2X

mix well

Spin 10 min

Remove Supernatant

Suspend Pellet in 400 μ l 0.02M DMSO

Add 400 μ l 2X dissociation buffer

Rew on 0.15% Preparative stacking

gel

100V 1 1/2 hrs

Cut off part of Gel w/markers

some of gel

STAIN
DESTAIN.

Cut out band at appropriate size

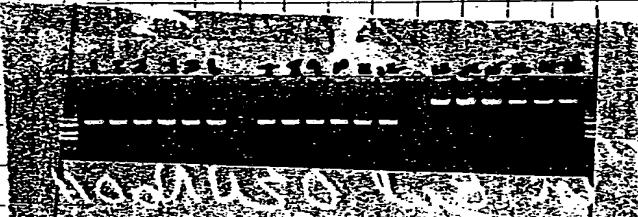


Store Gel slice at
4°C in 15ml Conical

Tube

10/25/95

Incubate 37°C 16 hrs
Run 1 gel on gel with 1kb ladder



1	Bam HI	Bgl II)
2	Bam HI	Nco I	
3	Bgl II	Bam	{ PDE6
4	Bgl II	Nco I	
5	Nco I	Bam HI	
6	Nco I	Bgl II	

7	Bam HI	Bgl II)
8	Bam HI	Sph I	
9	Bgl II	Bam HI	{ PDE7
10	Bgl II	Sph I	
11	Sph I	Bam HI	
12	Sph I	Bgl II	

13	Kpn I	Bam HI	Bam (Asp)
14	Bam HI	Bgl II	
15	Bam HI	Kpn	{ PAZ
16	Asp 718	Bam HI	
17	Bgl II	Bam HI	
18	Kpn I	Bam HI	

Run Gel of HTPAN08 E. coli purified proteins
to determine concentrations

Samples: HTPAN08 185bp ATG 2/15
51 bp ATG 2nd Unmid Elect 5/20
51 bp ATG pH 5 10/11
51 bp ATG pH 5 10/12
51 bp ATG pH 6 10/12

use BSA - 10 μg/ml as standard.

10/25/95

Run 10 ul of HTP AN Sample

500 μ l H₂O
 50 μ l 0.15% NaDOC
 7 μ l 50% TCA
 10 μ l Sample

Mix well

Aspirate off Supernatant

Rinse pellet on Bul 0.2N NaOH

Add 8 ml 2X Dissociation Buffer

Heat 100°C 5 min

Run entire amount on 10% Acrylamide gel.

BSA

BSA - 500 ng }
 750 ng }
 1 μ g }
 2 μ g }
 3 μ g }
 4 μ g }
 5 μ g }
 10 μ g }
 100 μ g }

To all samples
 dilute to desired
 Amt Add 10 μ l 2X
 dissociation buffer
 Heat 100°C 5 min
 Run entire Amt in
 gel w/ th marks

Run 150 V 1.3 hrs

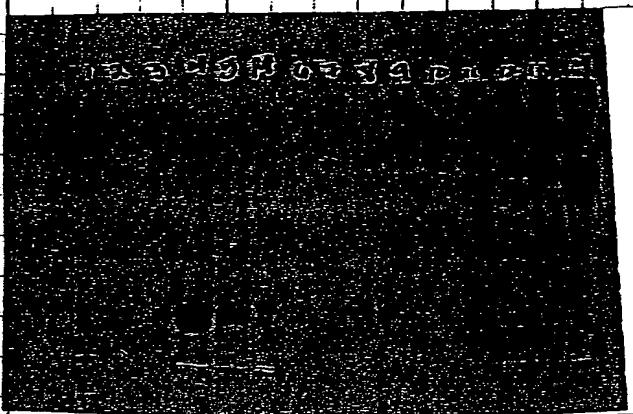
Stain 37°C 1/2 hr.

DE52A/1N over night at RT

Send 100 μ g Proteins to Ricks lab
 at Geophysics
 2 Batches of 50's
 TGF X

10/26/15

Take Pictures of HTPAND8 Gel



1	185 bp	2/15	HTPAND8
2	51 bp	2nd elut	
3	51 bp	pH 5	
4	51 bp	pH 5	
5	51 bp	pH 6	
6	500 ng		BSA
7	750 ng		
8	1 μg		
9	2 μg		
10	3 μg		
11	4 μg		
12	5 μg		
13	10 μg		
14	100 μg		

HTPAND8

185 bp 2nd elut ~ 600

→ 60 ng/μl

HTPAND8

51 bp 2nd elut X

→ X

51 bp 10/11

300 → 30 ng/μl

51 bp pH 5 10/12

10 μg → 1 μg/μl

51 bp pH 6 10/12

4 μg → 400 ng/μl

Set-up samples for westerns -

Use:

- (1) HTPAND8 185 bp 60 ng/μl = 100 ng
 (2) pH 5 10/12 1 μg/μl = 0.1 μl
 (3) pH 6 10/12 0.4 μg/μl = 0.05 μl.
 (4) → Gels 1 unduced Crude

Run 3 Gels - Marker 1, 2, 3, 4, Marker 1, 2, 3, 4, Marker 1, 2, 3, 4
 will get a total of 9 blots.

10/26/95

DO Different Amounts of Samples.

	50ng	200ng	500ng
185 bp	0.830	3.330	8.33
pH 5 10/12	0.05	0.2	0.5
pH 6 10/12	0.125	0.5	1.25

for all samples:

500 μl H₂O
 50 μl 0.1% NaOH
 75 μl 50% TCA

Mix well

Spin 10 min

Remove Supernatant

Resuspend different Quantities of protein in 0.8ml 0.2N NaOH

Resuspend the 100 ng Samples in 1.5ml 0.2N NaOH

Add equal Volume 2X dissociation Buffer

Run 10μl of 100 ng Sample per lane and all of different Quantities

Marker	185 bp	pH 5 10/12	pH 6 10/12
	50ng 200ng 500ng	50 200 500	marker

Run at 100 V 13 hrs

Transfer Gels to Nitrocellulose

Western transfer - See pg 34

10/5/95

10/26/95

After transfer is complete.
Mark Markers.

Cut into Strip Blots.

Store at 4°C. in Western Block
Buffer: 3% BSA Fraction V
0.02% Na Azide. in PBS.

Get Rabbit Ab from Young Soo Kim

Rabbits	11940 + 11941
Large Bleeds	9/22/95
	10/20/95.

Do Western.

Dilute Ab 1:200 in Western Block
Buffer.

(1)	11940	9/22/95
(2)	11940	10/20/95
(3)	11941	9/22/95
(4)	11941	10/20/95.

Incubate at RT w/ shaking
over night.

"PAPER Chase"

10/27/95

Western.

Pour off Ab.
Rinse filters in 1x PBS.
Wash filters in 1x PBS
5 min. at RT

10/27/95

Add 20 Ab. cip 1x PBS
1:1000 of Anti Rabbit Peroxidase
Conjugate.

Incubate at RT w/shaking
for 3 hrs

Pour off 90% Ab

Rinse filters 1x PBS

Wash filters 1x PBS 5min at RT
w/w Shaking

Pour off wash

Wash filters 50mM NaH₂PO₄ pH 7
at RT 5min w/Shaking.

Add Substrate:

12.5 ml 50mM NaH₂PO₄ pH 7

2.5 mg β-NADH

2.5 μl D Phenol

8.5 μl H₂O₂

3.75 ml NBT

Mix well

Add to filters

Incubate till desired color develops

Stop Rxn with dr H₂O

1-Marker 2-185bp 3-pH5 4-pH6 5-GalK



11490
9/22



11490
10/20



11491
9/22



11491
10/20

10/27/95

Set up more gels for HTTRAN 08.

Follow same Guidelines as in pg.
~~(030200)~~ - 100 ng of protein
 per well.

Store Blots in Western Block Buffer
 at 4°C.

PA24 PGE 60/70 Vectors.

Spin 15 min

Remove Supernatant

Wash Pellets 800ul 70% Ethanol

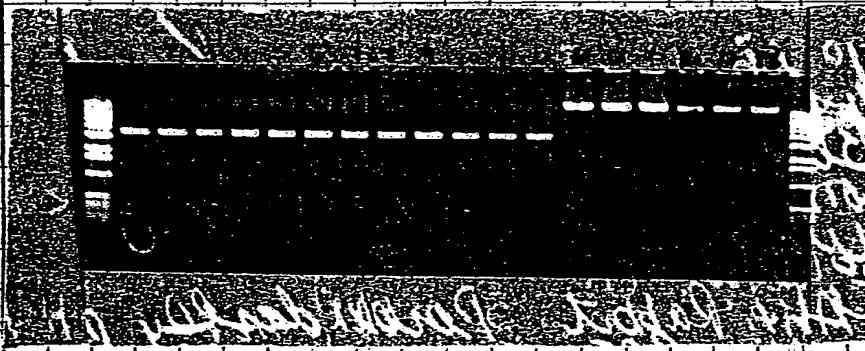
Spin 5 min

Remove Supernatant

Allow Pellet to Dry at RT for
 30 min

Resuspend pellets in 50ul TE

Run 1ul on gel with 1 Kb ladder



- 1 Bam HI / Bgl II
- 2 Bam HI / Nco I
- 3 Bgl II / Bam HI
- 4 Bgl II / Nco I
- 5 Nco I / Bam HI
- 6 Nco I / Bgl II

- 7 Bam HI / Bgl II
- 8 Bam HI / Sph I
- 9 Bgl II / Bam HI
- 10 Bgl II / Sph I
- 11 Sph I / Bam HI
- 12 Sph I / Bgl II

- 13 Kpn I / Bam HI
- 14 Bgl II / Bam HI
- 15 Kpn I / Bam HI
- 16 Bam HI / Kpn I
- 17 Bam HI / Kpn I
- 18 Bam HI / Bgl II

Store Vector #3 Box
 -20°C

10/30/95

Dilute 1⁰ Ab to see how far &
dilute protein & antibodies

Use Blots from 10/20 & 10/27

Blot	1 →	1: 200	10 ml Western Block Bu
2	→	1: 300	33.3 ul
3	→	1: 400	25 ul
4	→	1: 500	20 ul
5	→	1: 750	13.3 ul
6	→	1: 1000	10 ul

use 1⁰ Ab from #11490 10/20/95
Incubate O/N at Room temp
with Shaking.

10/31/95



Rinse 1⁰ Ab
Wash Blots 1x PBS
Wash Blots 3x min in 1x PBS
at Room Temp w/ shaking
Pour off Wash
Add Ab

Goat-Ant Rabbit Peroxidase
1:1000 in PBS
Incubate at Room Temp w/ shaking

Pour off 2^o Ab
Rinse Blots 1x PBS
Wash Blots in 1x PBS 5 min
at Room Temp w/ shaking

10/31/95

Pour off wash
Wash filters 50mM NaHPO₄ pH 7
at Room Temp for 5 min

Pour off wash.

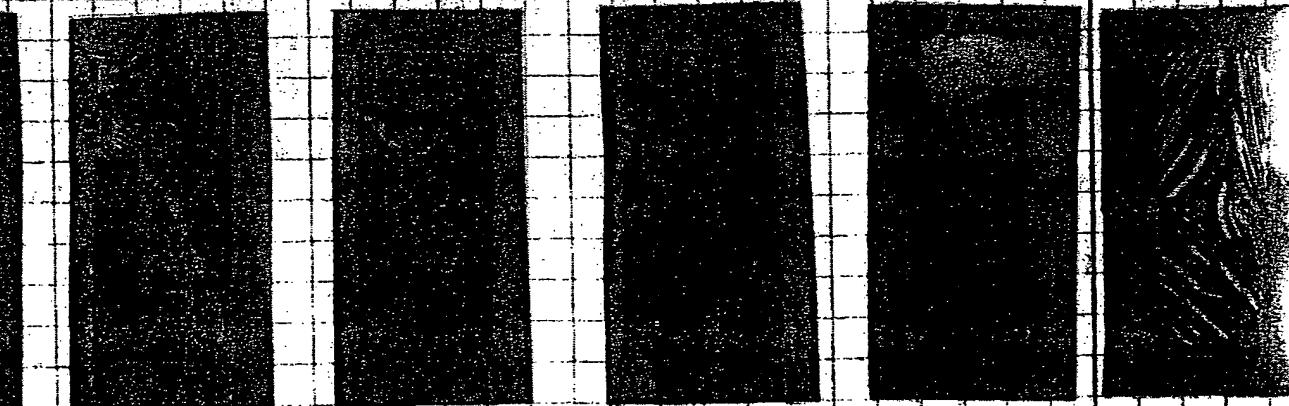
Add Substrate:

12.5 ml 50mM Na₂HPO₄ pH 7
25 µl Phenol
25 mg β-NADH
0.5 ml H₂O₂
375 µl NBT

Add to filters

Incubate to develop color -
Stop with the addition of
di H₂O

1 2 3 4 5 6



1.300

11400

1:500

750

1.1000

11.200

Looks like even at 1/1000 dilution
Protein looks good

70

1/1/95

Add 1° Ab at 1:1000 to Western
from 10/26/95 (Pg 64)

Incubate overnight at room temp
with shaking

= Will need to plate fibroblasts to sucker
for full length gene of

HS XCB49 - interferon
Currently it is Henrik Olsen's
project

1/2/95

Remove 1° Ab

Wash Blots 1X PBS

Wash Blots 5 min 1X PBS at
Room Temp w/ Shaking

Pour off Wash

Add 0.2° Ab at 1:1000 Dilution

in 1X PBS - Anti Rabbit Peroxidase
Incubate at Room Temp w/ Shaking

Pour off 2° Ab.

Rinse D. filters 1X PBS

Wash filters 1X PBS 5 min at RT
w/ Shaking

Pour off Wash

Rinse D. filters in 50mM Na₂PO₄ pH 7.0

Wash filters in 50mM Na₂PO₄ pH 7.0
for 5 min at Room Temp w/
Shaking

Pour off wash

Add Substrate

11/2/95

Substrate:

12.5 ml	50 mM NaH ₂ PO ₄ pH 7.0
25 mg	β -NADP
25 μ l	Phenol
8.5 μ l	H ₂ O ₂ (30% solution)
37.5 μ l	NBT

Add Substrate to filters
Allow Color to develop to desired
Darkness.

Stop Reaction with d H₂O
Allow Filter to air dry on Whatman
paper



lanes:

1 - Marker		
2 - 50 ng	?	HTPANOS
3 - 200 ng	?	85 bp ATG
4 - 500 ng		
5 - 50 ng	?	HTPANOS
6 - 200 ng	?	51 bp ATG
7 - 500 ng		pH 5 10/12
8 - 50 ng	?	HTPANOS
9 - 200 ng	?	51 bp ATG
10 - 500 ng		pH 6 10/12
11 - Marker		
12 - Galk	Unreduced	

TITER HBT library →

1:10 → 1:100 → 1:1000 1:10⁴ 1:10⁵ 1:10⁶ 1:10⁷plate out ~~100~~ , 1:10⁶ , 1:10⁵ , 1:10⁴

11/2/95

Inoculate 200 ml LB + 10 mM MgSO₄, 2mM
 Maltoose with frozen stock of
 AE392
 Incubate 37°C w/aeration overnight

11/3/95

Plate out HBJ, HSX, HFL
 20 plates - 30,000 plaques/plate

HBJ - Titer: $60,000 \rightarrow 60 \times 10^3$ /ml
 HSX - 0.5×10^6 /ml
 HFL - 2.2×10^6 /ml

Spir AE392 O/N Culture
 3K. 15 min

pour off supernatant
 Resuspend Cells in 10mM MgSO₄
 OD₆₀₀ = 1.0

To 6ml Cells add phage

HBJ - 1ml
 HSX = 0.000025 ml
 HFL = 0.000027 ml

Inoculate Cells & phage 37°C 15 min

Heat LB + 0.75% Agarose in Microwave to
 melt all of Agarose.

Dispense 7ml per tube and place on
 0°C block until to cool.

After incubation of Cells & Phage is complete

11/10/95

Computer Work

~~11/11/95~~

11/13/95

Develop HSXCB 49 $^{\circ}$ Screens
again.looks like there are a couple of (P)
picks onto 500ul 8m Buffer

HSX - 1, 2, 3, 4

HFL - 1

ABJ - 1

PCR to test if insert is there
Get FP03 primer from Laurie (LAI)

HSXCB49FP03 (3.2 μM)	2	
m13R (λ D>X)	0.02	(+) control
10x dNTP	5	plasmid
10x PCR	5	DNA
H ₂ O	35.8	
Taq	0.2	(-) control
Phage	2	H ₂ O
	50μl	

PCR - PROGRAM 58.

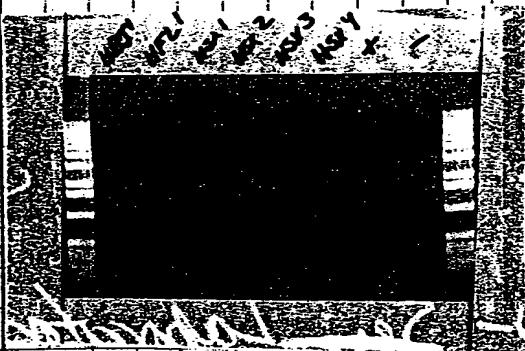
95°C	5 min	
95°C	1 min	
55°C	1 min	30x
72°C	2 min	
72°C	7.1/2 min	
4°C	Hold	

11/13/95

Plate 2° -
 300ul 1E392 O'Dowd
 + 2ul of 2° phage

Incubate 37°C 15 min
 Plate onto 150mm N24 plates
 in 7ml N24 + 0.7% agarose.
 Incubate 30°C O/N.

Run 10ul of PCR Reaction on
 1% TAE gel with 1 kb ladder.



Nothing worked
 even (+) control
 Get another
 primer from
 Laurie & try
 again.

Received Primers -

Some -

Diluted to 3.5 pmol/ul for
 Sequencing

Jean Ni → Requested Rabbit Antibody
 Serum -
 I gave him ml each:

1149 - 10/22/95
 # 1149D - 10/22/95

11/17/95

Pick 2° (1) clones of HSX-

~~No 2°~~ (1)

Only HSX 2° - 3 share any (1).

Picked 12 into 200ul SM Buffer

Do PCR.

M 3R	0.05
M 3F	0.05
D _X	10
D _X	10
H ₂ O	77.6
Taq	0.3
Phage.	2
	100

PCR Prog 58.

95°C	5min
95°C	1 min
55°C	1 min
72°C	2 min
72°C	7 1/2 min
4°C	Hold

Run 10ul on gel



~~New pl. file~~
11/29/95

11/20/95

Analyzed sequence of
egf clones - They all blast as
part of the egf/fgf family

Worked on HOVQ17 clone - See # 289

90

11/22 - 11/26 ~~at~~ Out of office

11/27/95.

Carrie Received clones from
finishers

DATE 11-21-95

CLONE PROCESSING SHEET

Clone I.D. HOAA046, HELDQ06, HCEEX61, HOEOF83, HTEBY23
*(transf
per
11-20-95)*

Requested By Steve Ruben

Transfer Folder 11-17-95

Processed By AMG

DATE 11-20-95

CLONE PROCESSING SHEET

Clone I.D. HTEGS 33

Requested By STEVE RUBEN

Transfer Folder 11/20/95 TRANSFER

Processed By JIM BCI

Inoculate 250 ml TB + Amp with
Culture

Carrie Sick so inoculate HEPCLV
for her.

Incubate 37°C 0/1N w/ aeration

12/4/95

HNEDJ57

		62 X
95-117	0.08	4.96
m13R	0.02	1.24
10X dNTP	3.2	198.4
10X PCR	3.2	198.4
H ₂ O	22.3	1382.4
Taq	0.3	18.6
@Prage	2	
	32	

plot 165
 should be OK
 HSAV83
 should be CS 1190
 since HSAV83
 is for HSAV83
 and HSAV83
 from HSAV83

Rec'd Primer for HTTAN08504 51bp + PDEG

3' Hind III	#14388	2	24
5' Nco I	#2888	4	48
10X dNTP		3.2	38.4
10X PCR		3.2	38.4
H ₂ O		16.3	195.6
Taq	0.3		3.6
DNA (vugifil)	4	1	10
		32	832ul / tube

Run PCR Prog 58

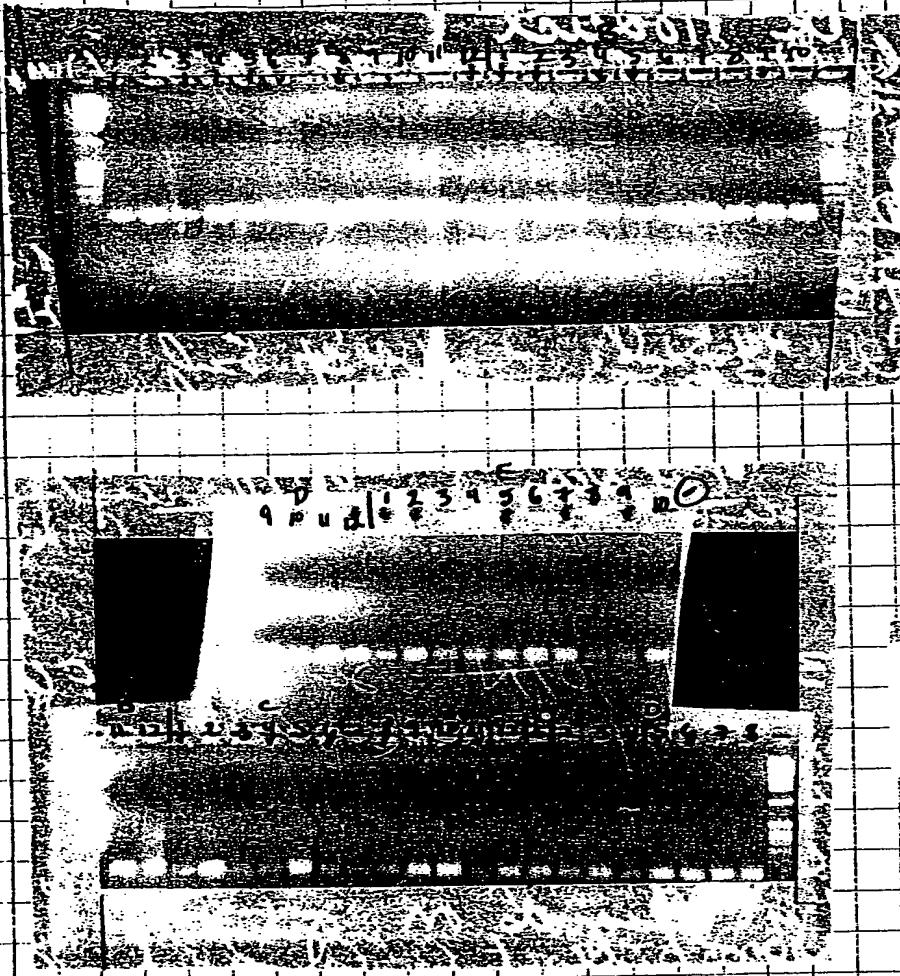
95°C 5 Min
 95°C 1 min
 55°C 1 min } 30x
 72°C 1 min
 72°C 7 min
 4°C Hold

Run 10ul on gel with
1kb ladder

Residual of
HTTAN08504

97

12/01/95



Pick + for 2° Screening's

A-1	A8	B5	C8	D	D12	E9
A-3	A12	B9	C11	E1		
A-4	B1	C1	D4	E2		
A-5	B2	C9	D5	E5		
A-6	B4	C6	D6	E7		

Dilute 1:1000 place 10ul onto 100mm
NZY Plates
Incubate 30° 2 O/N

98

12/4/95

PLG PGT PCR Product
ethanol wash
Resuspended pellet in 2ml TE

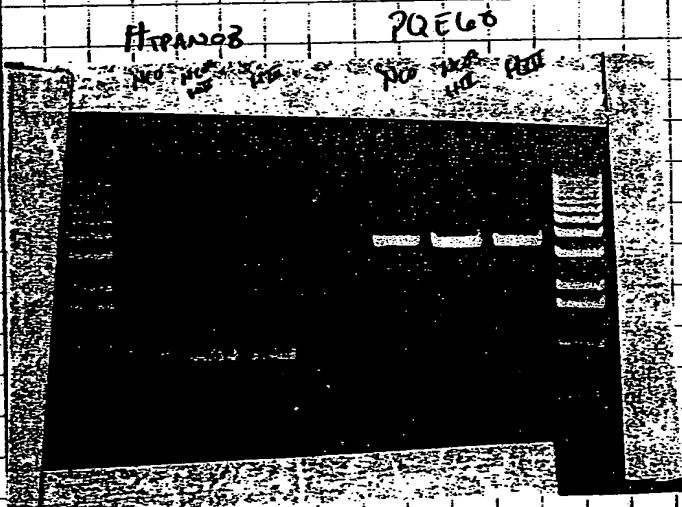
Set up Digestion.

	NCO	Nco/Hinf	Hinf
10X #4	#4-5ul	4 4 -5ul	4 4 -5ul
H ₂ O	29 ul	29 ul	29 ul
DNA	15ul	15 ul	15 ul
Enzyme	1ul Nco	0.5/0.5	1.0KU/ml
	50ul	50ul	50ul

Incubate 37°C 0/N - Set up PQE60
Digests the same as above

12/5/95

Ran 10ul of Digests on gel with
1 kb ladder



D / 5 / 95

Add other engine

- HU - TO NO NICI Dugos

- Noel to HII Dreddy

Incubati 37°C ~~00000~~ 4 m/s

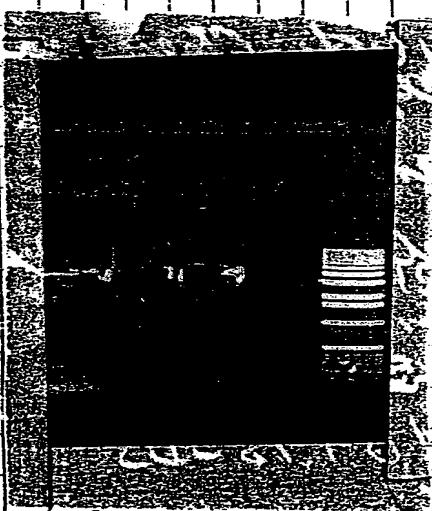
WAGGON

Run PGE(6.0) on 0.7% Agarose
1 MP Agarose gel w/ 1 kb ladders

PEG Ppt HITPAN 08504 Products

Reassess in 2011.

Gel isolate PQE₆₀ HII/Nco Digest
will be PQE₆



Gene Clean
gel slice

Resuspend cells
in Total of 40 ml.

Set up negotiations

100

12/5/95

Incubate ligations at 16°C Overnight.

HNE-DJ57 2° did not grow dense enough
replate

at 1.5OD plate O/DL.

Incubate 34°C. 5 hrs.

Most plates look good.

a- Compe^c look like they need to
be re plated at a higher concentration.
Incubate 30°C O/DL

12/6/95

Transform ligations into Chemically
Competent M15 ice 4 cells

Thaw Chemically Competent M15 Cells
on ice

To 100 μl Competent Cells add 10 μl
of ligation Reaction

Let sit on ice 1 hour

Heat 42°C for 1 min

Chill on ice

Add 400 μl LB

Incubate 37°C 1 hr
plate 150 μl onto LB + Amp plate.

Incubate 37°C O/DL

(③) Control pQE100 plasmid DNA

~~HNE-DJ57 FBS should be HS/HRV83~~

2° grew OK.

Chill plates at 4°C 1 hr

12/8/95

Do plate lifts w/ orientation marks.

Denature lifts 2 min.

0.5M NaOH / 1.5M NaCl

Der Neutralize 5 min
0.5M Tris pH 8 / 1.5M NaCl

Allow filters to dry at RT.

Precipitate in 2x PIPES / 50% Formamide
overnight at 42°C.

12/9/95

Probe Human Tissue Northerns

HE2PM21 → H. Fetal (F) + H. MTN II (~~H~~ h)
HTPAN08 → H. MTN II (H) + Cancer (C)

Precipitate in Express lipo 42°C.
2 hrs.

Make Probe -

B HE2PM21 Xho/R
HTPAN08 S04 Xho/R
H3HBV83 Xba I R

DNA	3	Heat 100°C 5min
H ₂ O	2	Gelade Spin
5X Primer	10	Place on ice
	34	

102

12/7/95

Add
5X P^{32} dATP Buffer
 $3\mu\text{g}$ dATP
Klenow

10

5

1

5μl

Incubate 37°C 8 min
Spin through G-25 Column
Count 1 ml

SAM	POS	CH	CPM
HE2PM21	1	135	1 787036.00 70μl
HSABV83	2	136	1 693160.00 70μl
HTPAN08	3	137	1 674388.00 70μl

Add 5μl Salmon Sperm DNA
to probe

Heat 70°C 5 min

Quick Chill

Quick Spin

Add probe to HE2PM21 Northern
and HTPAN08 Northern

Incubate 42°C 4 hrs

- Wash Northern's
 $3 \times 65^\circ\text{C}$ 0.2 x SSC / 0.1% SDS

Put on film

- 80°C overnight

For HSABV83-

Dry off perhaps from Filters

Add probe

Add alkaline NaOH probe to myb
Incubate 42°C 0.1 hr

12/7/95

HTPAND8 + POF 6

Pick colonies into LB + Amps Kan
Media in 96 well dish

Pick 12 each of 1-9.
6 each of 10-15

Incubate 37°C w/aeration 3 hrs
Set-up PCR.

	x 150Y.
5' POF	0.2
3' POF	0.1
10xPCR	3.2
10xdNTP	3.2
H ₂ O	29
Taq	0.2
Cult.	2
	32

3ml/well.

PCR Prog 66.

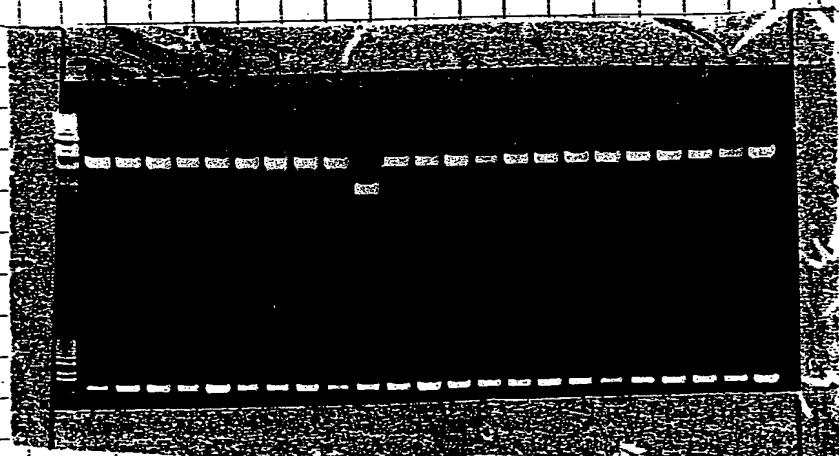
95°C	5min	
95°C	20sec]
55°C	20sec	30x
72°C	1min	
72°C	7½ min	
4°C	Hold	

④ Control

POF(6)

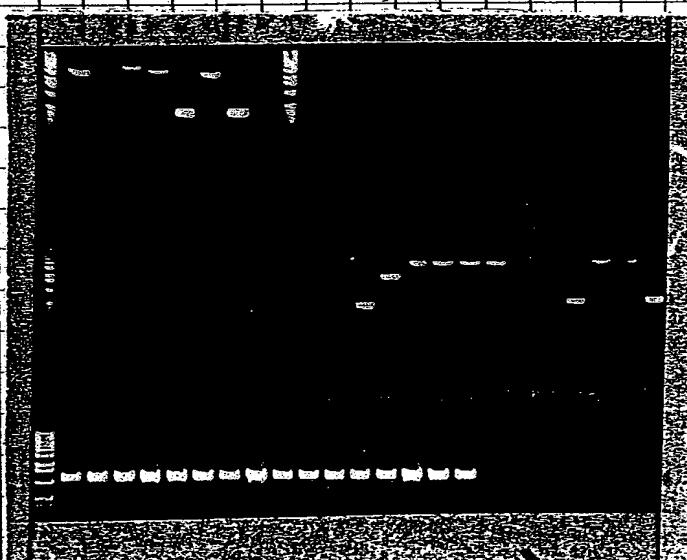
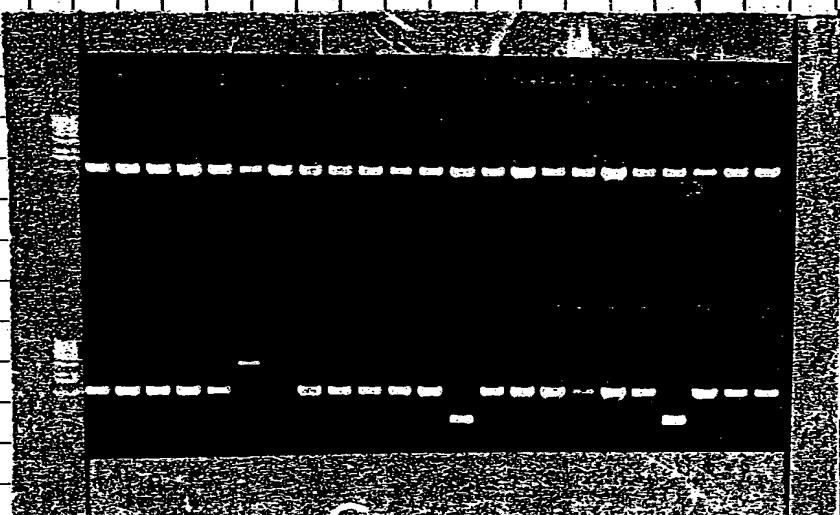
⑤ Control ssDNA

Run 10 ml on gel w/ 1 kb ladder



104

12/7/95



Pick Clones for
Borling Minipups

1-1	3-8	5-6	7-1
1-2	3-10	5-7	7-2
1-3	3-11	5-8	7-3
1-4	3-12	5-9	7-4
2-5	4-1	6-9	8-5
2-6	4-2	6-10	8-6
2-7	4-3	6-11	8-7
2-8	4-4	6-12	8-8
9-9	9-11	9-10	9-12

into 5ml TR+amp/ha

12/8/95

Borling Mini pup5.

Spin 2ml Culture 5min
Remove Supernatant

12/18/95

Resuspend pellet in 800 μl STE
+ DNase & lysozyme.
Heat 100°C 5 min
Spin 15 min
Transfer 750 μl Supernatant to
fresh tube
Add 750 μl PEG / NaCl
Mix well
Spin 15 min
Remove Supernatant
Wash pellet 1000 μl 70% ethanol
Spin 5 min
Remove Supernatant.
Allow pellet to air dry.
Don't go too long - 2 hrs
Pellet very hard to resuspend.
Add 200 μl TE to pellet
Store 4°C over weekend.

H.SHBV83
Wash filters 0.2XSSC / 0.1% SDS
3X (65°C)
Put filters on film.

Northern.
Developed Film.
Very faint

Re-expose - 80% over the weekend.

106

4/11/95

HSHB183 2°

Pick 2° plups into 200 ul Sm
Buffer

Screen PCR.

05-112	0.1
M13R	0.05
10xDNTP	5
10xPCR	5
H ₂ O	34.6
Taq	0.25
Phage	5
	50ml

95-114	0.1
M13R	0.05
10xDNTP	5
10xPCR	5
H ₂ O	39.6
Taq	0.25
Phage	5
	53.7

PCR Program 58

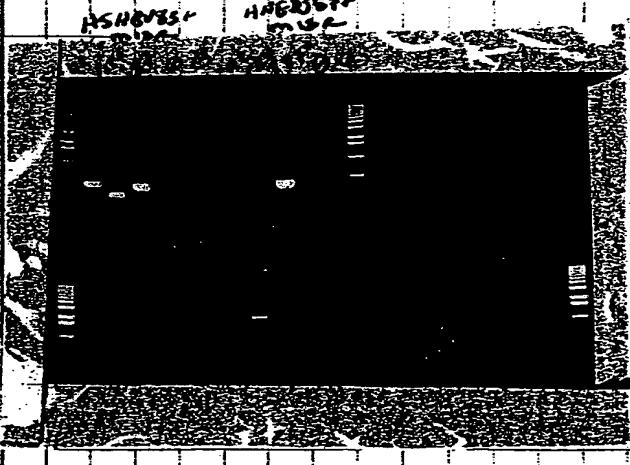
95°C 5 min
95°C 1 min
55°C 1 min 30x
72°C 2 min
72°C 7 1/2 min
4°C Hold

Check Primers pairs on
HSHB183 Plasmid DNA
HNEDJ57 Plasmid DNA

use 91-87 which should
be HNEDJ57 Specific

Run 1D gel on 0.8% agarose with 1Kb ladder

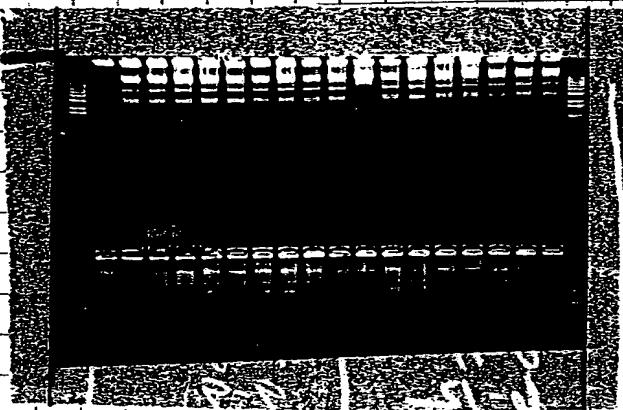
13-1
13-2
13-3
15-1
15-2
15-3
17-1
20-1
20-2
20-3



Inoculate
XL-1 MRF
SOLE
L-E392
to Excise

Resuspend HTPAN08 + PQECO clones
in 10ml TC
run 2ml on gel w/ 1 kb ladder

12/11/95



Set up Digest.

		381
DNA	5	
10X #4	3	114
H ₂ O	218	8.28.4
N. ₂ O	0.1	3.8
1TIII	0.1	3.8

Incubate ^{37°}C
at Room Temp
overnight

Small Scale induction:

Incubate 500 μl of LB + Amp/kan w/ 1 μl of O/N culture of HTPAN08+PQECO.

Incubate 37°C 1 1/2 hrs
Add 1 μl of 1P11G (100mM) + 2mM.

Incubate 4 hrs w/ agitation 37°C.

Spin culture 3min

Resuspend pellet 40μl H₂O.

Add 10μl 2x dissociation Buffer

Store -20°C or Run on 15% Gel

Develop Northern.

Difficult to say if there is anything
Strip blots 0.5% SDS in 250ml H₂O

Heat 5 min in microwave

Place blots in 0.5% SDS.

Incubate 10 min.

Repeat until No counts can be
heard

107

S

X

L
8.4
8.8
8

120

R 25° NNE

1083

107

5

4

3

107

Resuspended HTPAN08 + PQEC6 clones

12/11/95

X

1

2

3

4

5

6

7

8

9

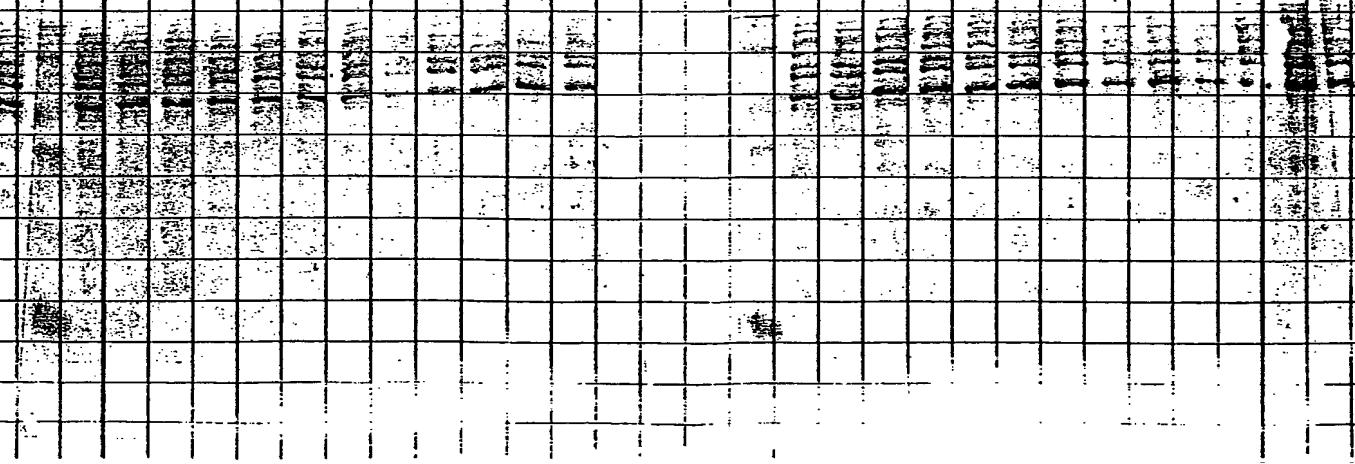
0

12/12/95

Run 10_{uL} of induced Proteins on
15% SDS-PAGE Gel.

	Gel 1	Gel 2	Gel 3	Gel 4
Line 1	Marker			
2	1-1	3-10	5-9	8-6
3	1-2	Marker	6-8	8-7
4	1-3	3-11	Marker	8-8
5	1-4	3-12	6-9	8-9
6	1-5	4-1	6-10	9-8
7	2-5	4-2	6-11	9-9
8	2-6	4-3	6-12	
9	2-7	4-4	7-1	9-10
10	2-8	5-5	7-2	9-11
11	2-9	5-6	7-3	9-12
12	3-8	5-7	7-4	9-9 UN
13	3-9	5-8	7-5	2-5 UN
14	3-10 (2-5 UN)	4-3 UN	8-5	4-3 UN
	14		6-12 UN	6-12 UN

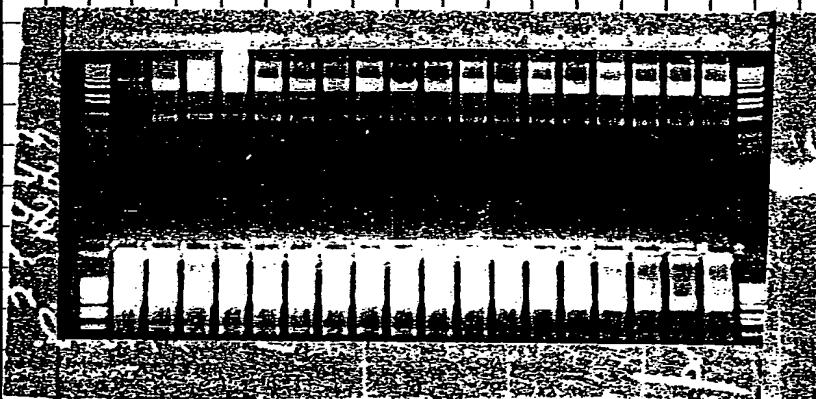
Run 150 V 1 1/2 hrs.
 Stain 30 min at 57°C
 Post stain 1 hr at 37°C
 Dry Gels.



12/12/95

Can't tell Do Small Scale
inductions

HTPANOS + PDEG.
Nco I/HII digest



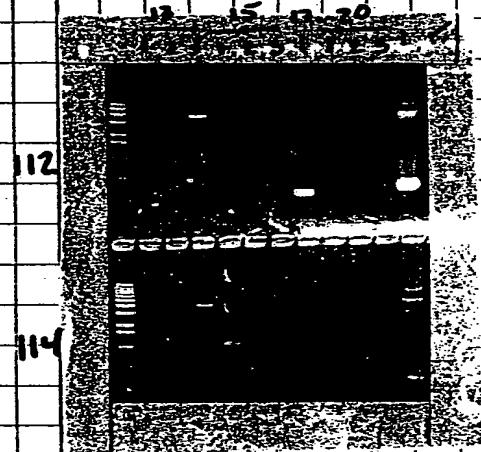
All clones
look correct
submit
for sequencing

Rescue H5HBV83 20-1
20ul phage + 100ul XL-1 Blue MRF 00_{cat}-1.0.
+ 10ul Ex Assist
Incubation 37°C 15min
Add 2ml 1B.
Incubate 37°C 2 hrs
Heat 68°C 15 min
Spot - Plate 1ul 15ul/10ul/200ul SODK

116

12/15/95

Ran 10μl on gel w/ PKb ladder



112

114

On Monday Plate

13-3

15-1

20-2

17-1

H5HBV83

HTPANO₃ + PQE10.

PCR 1-1, 2-5, 3-8, 4-1, 5-6
with T₇ PQE 60/70 and 3' HAT
8 tubes of 30 μl

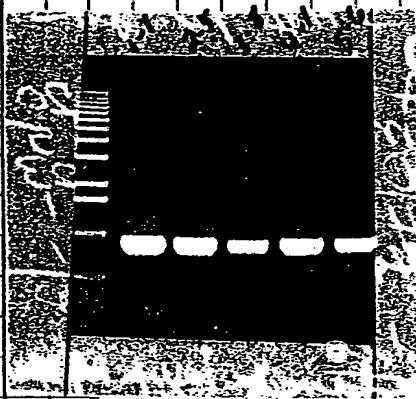
T ₇ PQE 60/70 (10 pmol/μl)	1	40
HTPANO ₃ 3' HAT	2	80
10X dNTP	3.2	128
10X PCR	3.2	128
H ₂ O	20.3	812
Taq	0.3	12
DNA (5ng/μl)	7	
	3.2	

PCR Program 66.

117

12/15/95

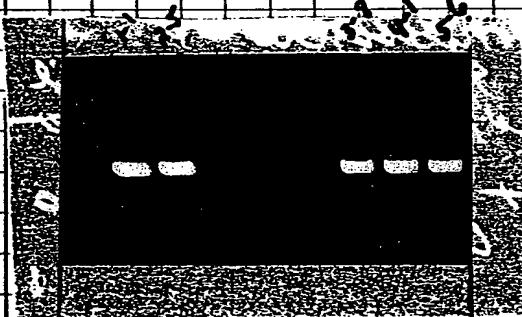
Run 5ul on gel w/ 1kb ladder



Combine the 8 tubes
Ppt Reaction with
Equal Volume
PEG/Mac

Wash pellet 1000ul
70% Ethanol.
Allow Pellet to Air
Dry.
Resuspend pellet in
100ul TE

Run 1ul on gel with 1kb ladder



Submit 1-1 + 2-5
for TNT - T7

along with HESCI76
for TNT - T3

12/18/95

HSAHV83-

Excision + Rescue.

200ul SOR OD₂₆₀ = 1.0
10ul Rescue stock

Incubate 37°C 5min

Incubate 4°C over night

12/22/95 | Personal Day: OFF

12/25/95 Christmas Day OFF

12/26 - 12/29/95 Company Break

Dec 1/1/96 New Years Day OFF

1/2/96 1 vac Day off

1/3/96 - 1/5/96 3 Personal Days DTF

1/8/95 - 1/10/95 Company Closed Due
to Weather.

1/11/95

Wrote in note book - Write progress report for Steve.

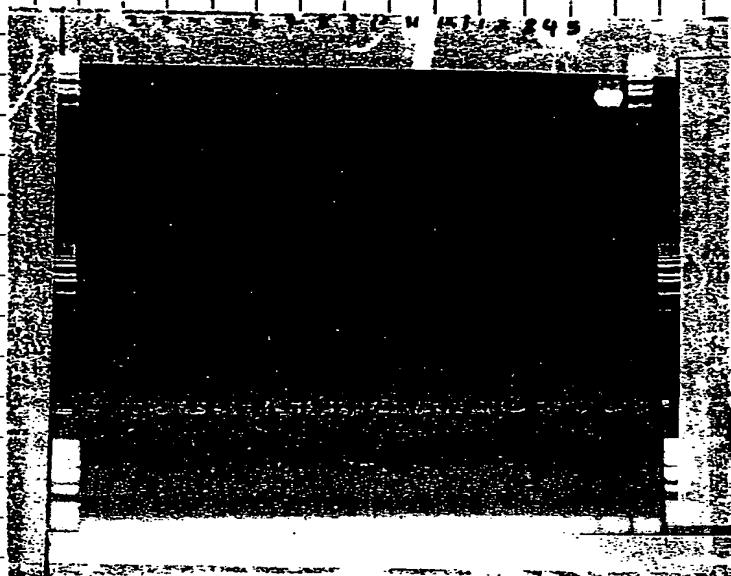
125

12/20/95

Run 10ul on gel with

10 Kb ladder

14 USAF 22 + PAR

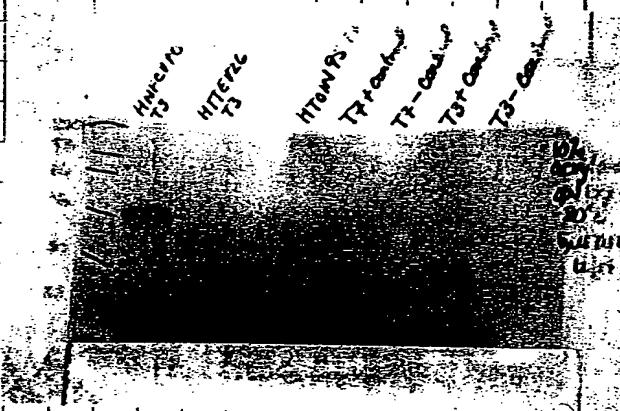
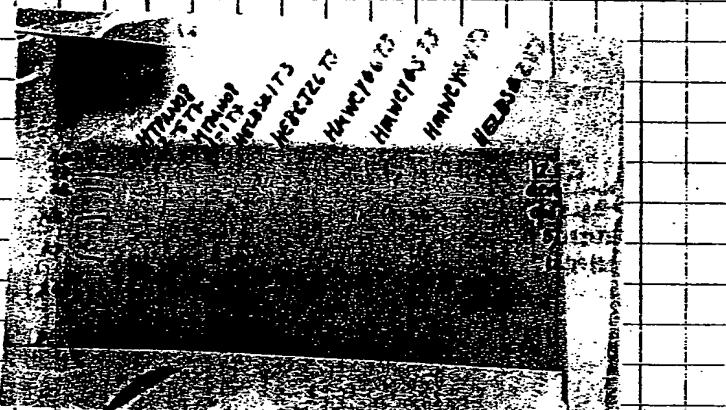


TNT RESULTS 12/19/95			
INVESTIGATOR	SAMPLE NAME	EXPECTED PRODUCT SIZE KDa	OBSERVED PRODUCT SIZE KDa
ANN KIM	HTPAN08+PQE6 #1-1	33	33
ANN KIM	HTPAN08+PQE6 #2-5	33	33
ANN KIM	HE8CJ26	30	NO PRODUCT OBSERVED (background band at 30)
JING SHAN HU	HMWCY #6	30	NO PRODUCT OBSERVED (background band at 30)
JING SHAN HU	HMWCY #5	26	NO PRODUCT OBSERVED
JING SHAN HU	HMWCY #4	33	NO PRODUCT OBSERVED (background band at 30)
JING SHAN HU	HELBS #2	37	MAJOR BAND AT ~25 (others at 29 & 36)
JING SHAN HU	HELBS #1	30	MAJOR BAND AT ~25 (others at 29 & 36)
BRENT KREIDER	HNFCV70	92	TRIPLET BANDS AT 44,46 & 48, MINOR BAND AT 30
BRENT KREIDER	HTTEV26	1.10	MAJOR BAND AT 36 (others at 30,40 & 27)
LAURIE INSCORE	HTOIN95	48	NO PRODUCT OBSERVED
T7 POSITIVE CONTROL	DNASE 02-105	33	33 (gel loading problem, but band is visible)
T7 NEGATIVE CONTROL	NO TEMPLATE	NONE	NONE
T3 POSITIVE CONTROL	HCACI93	33	33
T3 NEGATIVE CONTROL	NO TEMPLATE	NONE	NONE

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12/20/95 $\frac{1}{2}$

TNT Results Continued



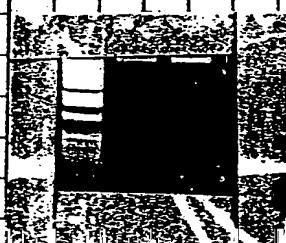
1207200

PPT Digests

HMSAF22 3 Delta S₈₈ / 3' Pg 1.11
HSKB009 HTH / SPH.T.
W/W equal Volume PET/MacL
-26 C overnight

12/21/95

Ran ~~the~~ GP PAR Digestion & Gene Cleaned
fragments on gel.
 Looks good.



Develop film + MN

12/21/95

Set up ligation:

	2	3	4	5	6	7	8	9
H5KBN09. HII / Spb I	3		3					
HMSAF 22 3' Delta 1sp 1Bg II		3		3				
HMSAF 22 3' ASP/Bg II			3		3			
PGE 7 HII / Spb.	2				2			
GP PAZ ASP/Bg II		2	2			2		
10X T4 Buffer	2	2	2	2	2	2	2	2
T4 Ligase	1	1	1	1	1	1	1	1
H ₂ O	12	12	12	14	14	14	15	17

Incubate 4°C over Break

12/22/95 1 Personal Day. OFF

12/25/95 Christmas Day OFF

12/26 - 12/29/95 Company Break.

12/31/95 New Years Day OFF

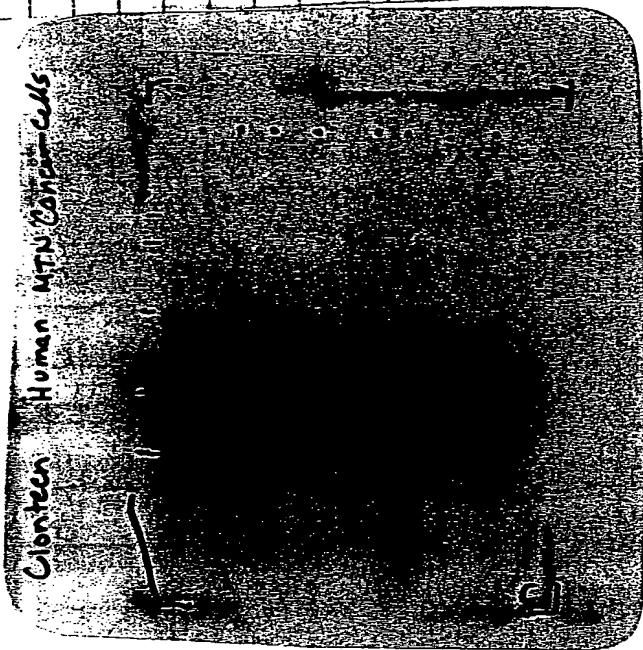
1/2/96 1 Vac Day OFF

1/3/96 - 1/5/96 3 Personal Days OFF

1/8/96 - 1/10/96 Company Closed Due.
to weather

1/11/96

Wrote in note book - Write progress
Report for Steve

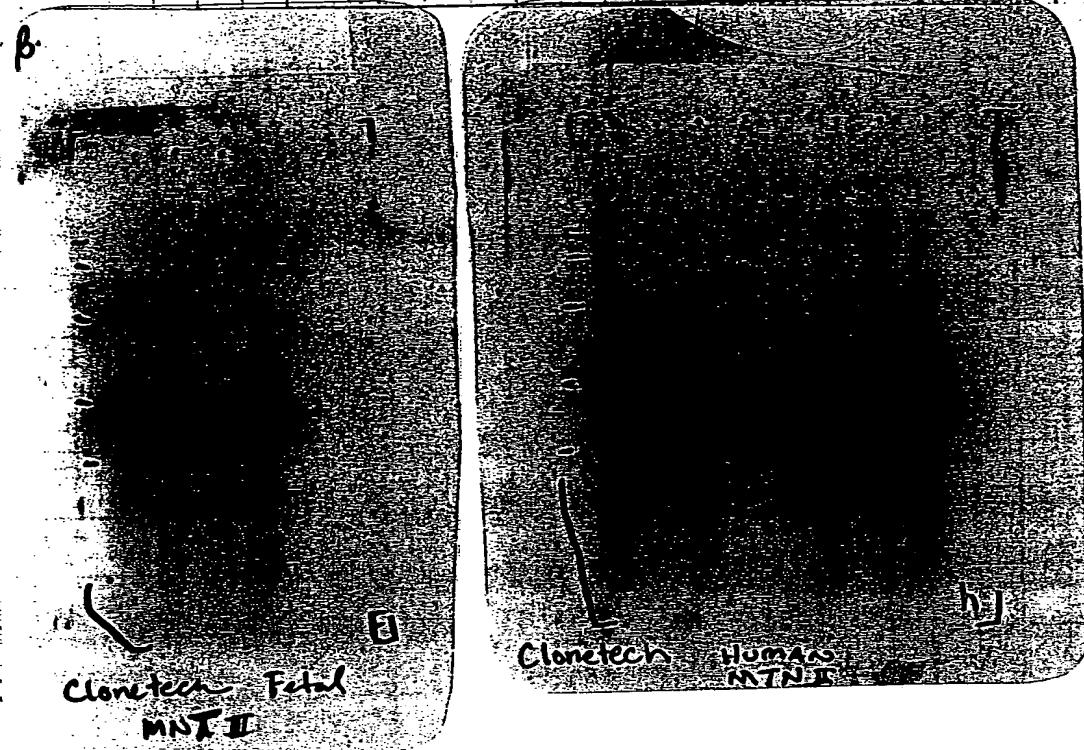


1/3/96 - 1/5/96 3 Personal Days OFF

1/8/96 - 1/10/96 Company Closed Due
to weather

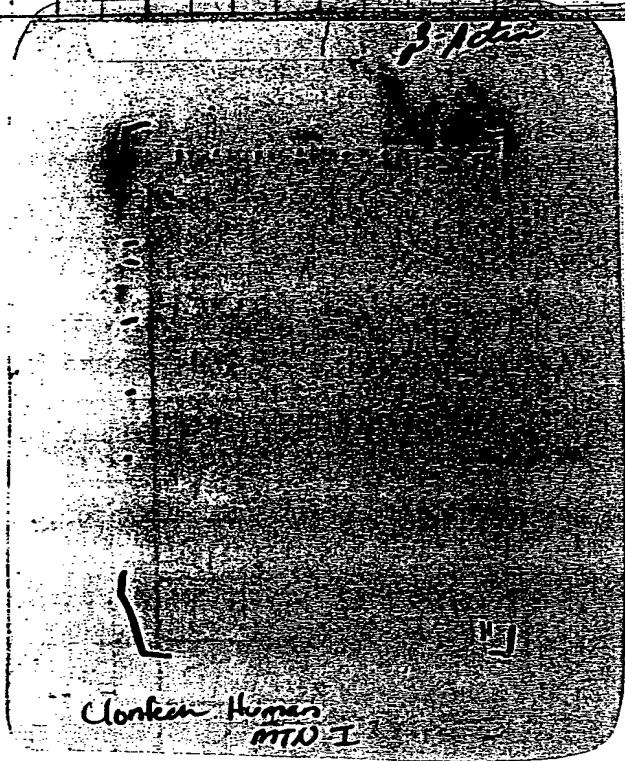
1/11/96

Wrote in note book - Write progress
report for Steve



1/10/96 - 1/14/96 1 vac away (OLD)
1/13/96 - 1/15/96 3 Personal Days OFF
1/8/96 - 1/10/96 Company Closed Due
to Weather. 1/11/96

Wrote in note book - Write progress
report for Steve



1/12/96 - 1/14/96 3 Personal Days OFF
1/13/96 - 1/15/96

1/8/96 - 1/10/96 Company Closed Due
to Weather.

1/11/96

Wrote in note book - Wrote progress
report for Steve

1/12/96 Company Closed due
to Weather.

1/15/96

1/15/96

Transform Ligation

for all PDE7 ligations transform
into Chemically Competent
M15rep4 (cells) and plate
onto LB + Amp Star plates

For all FPPS2 ligations Transform
into Chemically Competent
DH5 α - (GIBCO BRL) cells and
plate onto LB + Amp Plates.

Micropipette 10 μ l of ligation reaction
with 100 μ l of Expresso Chemically
Competent cells
Incubate on ice 1 hr
heat 42°C 1 min
Place on ice
Add 300 μ l LB
Incubate over ice at 37°C for 1 hr
Plate onto appropriate plates
Incubate 37°C overnight

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1/25/96.

Set up TNT Reactions T3.

1 HFFED 13
2 HETAQ37
3 HE201425 1.5

4 HTPB411.5/15 (+) controls
5 (-) control H₂O only

1 2 3 4 5

Rabbit Ret. Lys	12.5	12.5	12.5	12.5	12.5
T3 Buffer	1	1	1	1	1
AA G met	0.5	0.5	0.5	0.5	0.5
35S Met	2	2	2	2	2
RNAse	0.5	0.5	0.5	0.5	0.5
T3 Polymerase	0.5	0.5	0.5	0.5	0.5
DNA	0.5	0.5	4	4	3
H ₂ O	7.5	7.5	4	4	8
	25	25	25	25	25

Set-up reactions on ice

Incubate T3 + T7 Reactions
at 30°C 2 hrs.

Spin 1 min

To 5 μl 2X Dissociation Buffer add
5 μl Rxn

Heat 70°C 5 min.

Quick Spin

Run on gel at 150V 1½ hrs.

Stop run before dry front runs
off gel.

Fix for 30 min at 37°C with
Fixator: 10% O₂A_c
30% Methanol

Dry on BioRad Gel Drier between
Cellophane

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11/25/96

Meeting w/ Henrik Olsen
Yvonne Winsor
Maria Cepeda
Carrie Fischer
Steve Rubin

Discuss Cloning Core facility

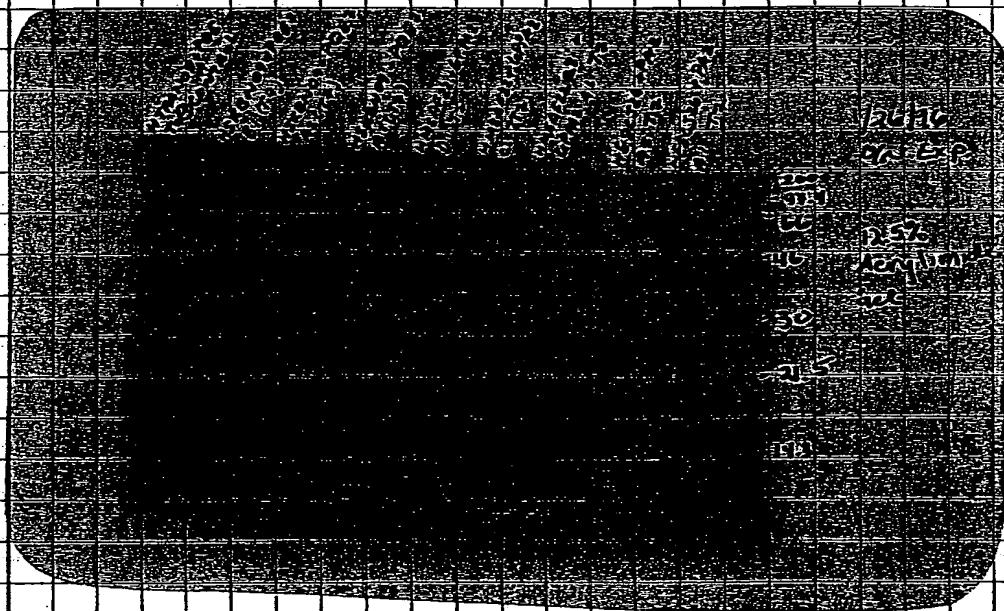
SOP etc.

Submitted : Cloning Request
form for approval of Group.

Decided on Vectors to have on Stock.

11/26/96

Develop TNT



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1/26/96

Paul

Case

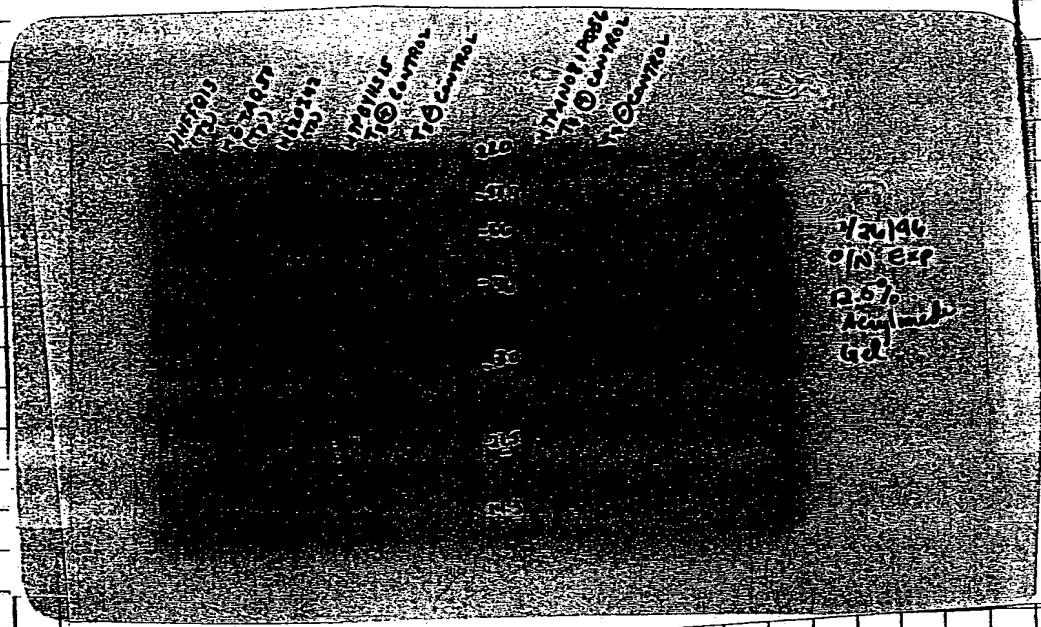
TNT RESULTS 1/29/96

INVESTIGATOR	SAMPLE NAME	EXPECTED PRODUCT SIZE kDa	OBSERVED PRODUCT SIZE kDa
YAJUN CHEN	HETAQ37	51	30 (51 = background?)
YAJUN CHEN	HHFFQ13	110	NO PRODUCT OBSERVED
ANN KIM	HSKBN09A1	37	26, 33, 37
ANN KIM	HSKBN09A5	37	26, 37
ANN KIM	HSKBN09B1	37	NO PRODUCT OBSERVED
ANN KIM	HE8CJ28A1	33	33
ANN KIM	HE8CJ28A5	33	37
ANN KIM	HMSAF22C1	37	33
ANN KIM	HMSAF22D1	37	26, 33, 37
ANN KIM	HMSAF22DELTAG'ASPAC2	33	37
T7 POSITIVE CONTROL	HTPAN08PQE6	33	33
T7 NEGATIVE CONTROL	NO DNA	NONE	NONE
T3 POSITIVE CONTROL	HTPBY11S15	94	96
T3 NEGATIVE CONTROL	NO DNA	NONE	NONE
REACTIONS PERFORMED BY:		ANN KIM	

1/29/96

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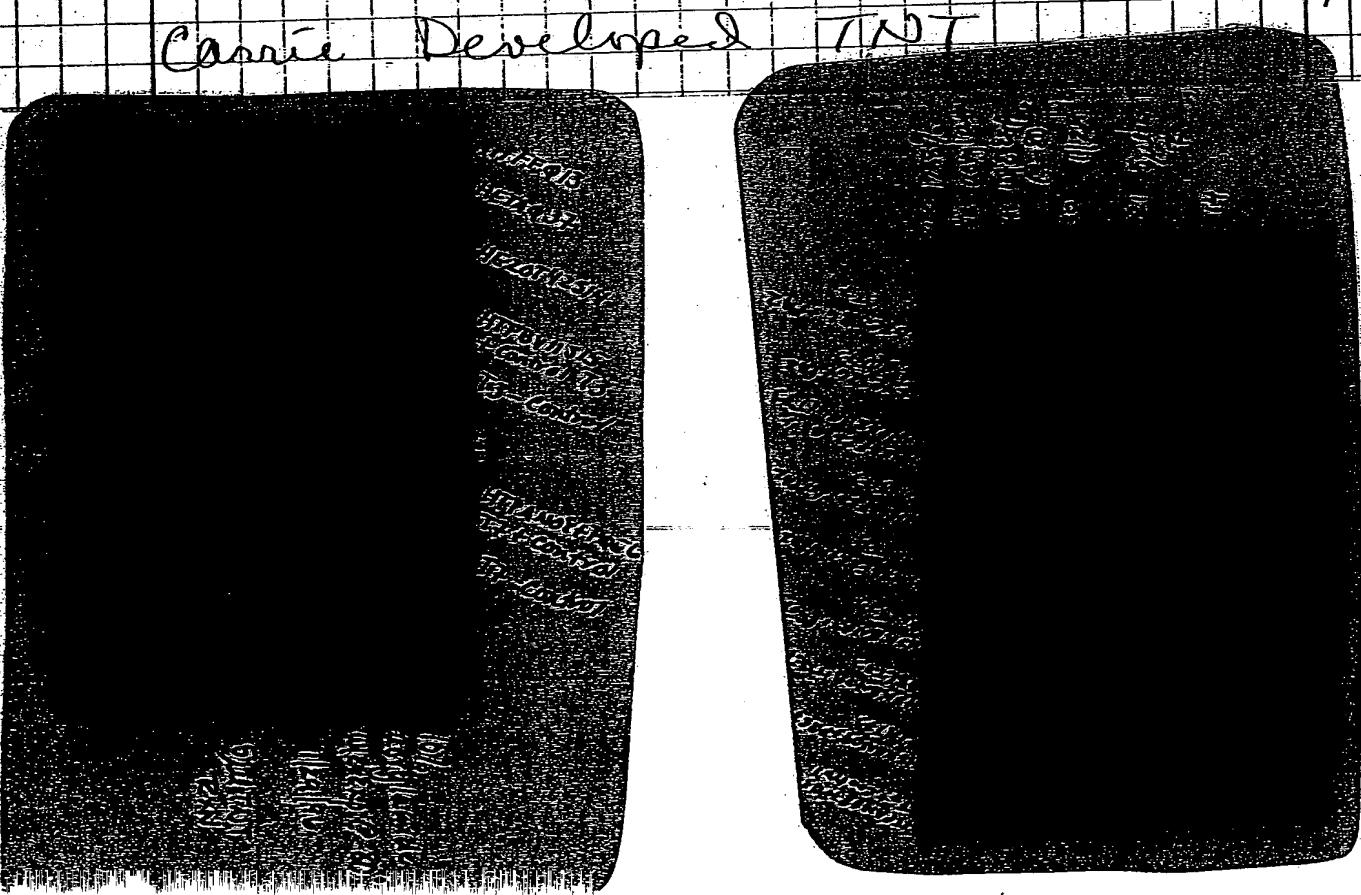
1/26/96



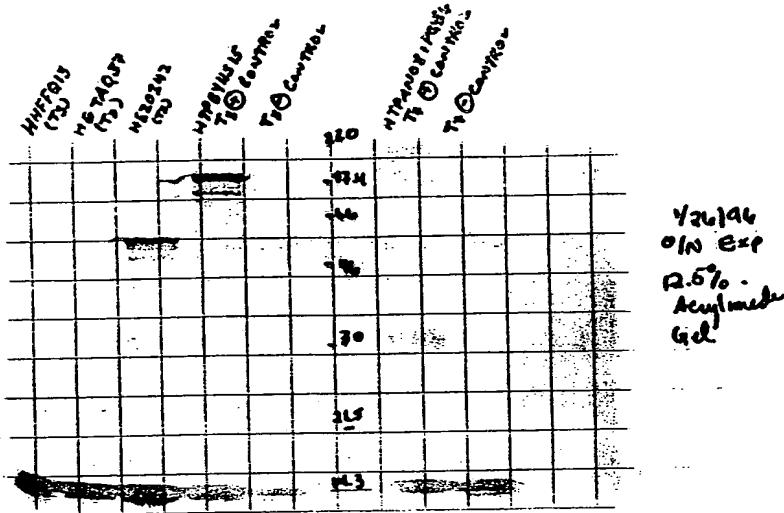
Put on film longer.

1/29/96

Carrie Developed TINT



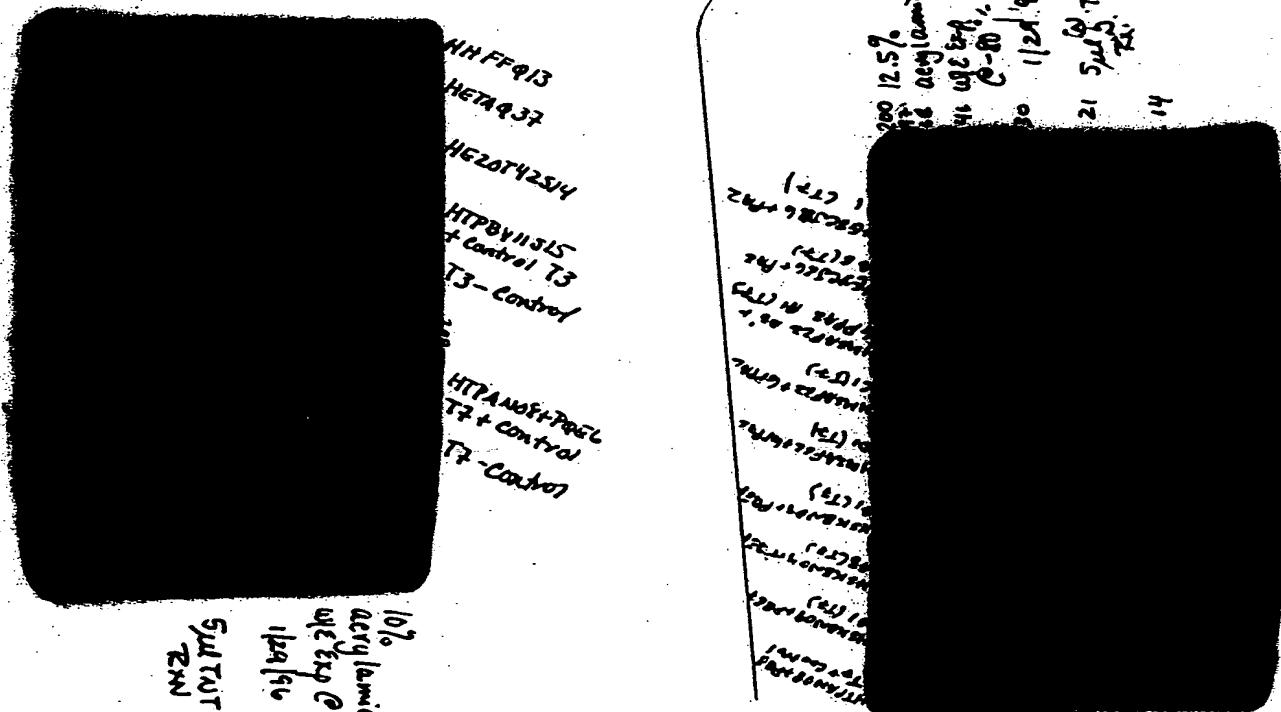
1/26/96



Put on film longer.

1/29/96

Carrie Developed TNT

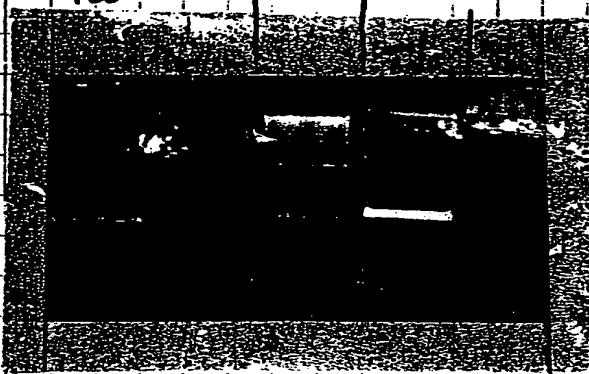


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1/26/96

PBSK

rCDNA 3' HA Tag

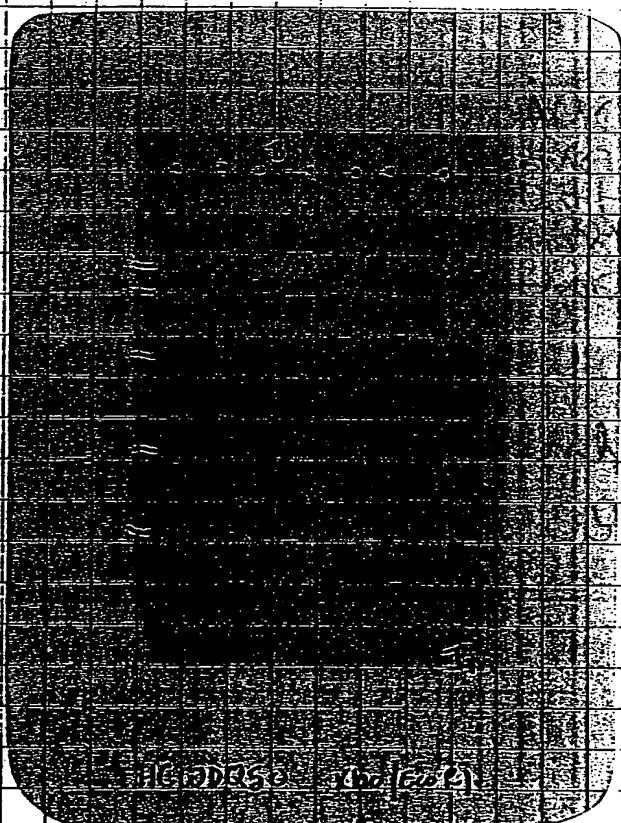
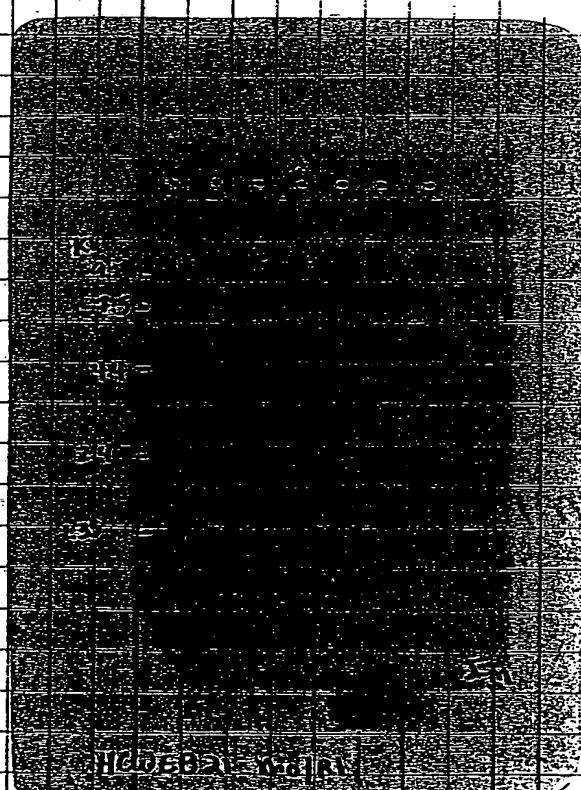


Store gel slices
at -20°C
Till Return
from Vacation

Vacation - 1/29/96 → 2/2/96

1/29/96

Carrage -
Develop Northern



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